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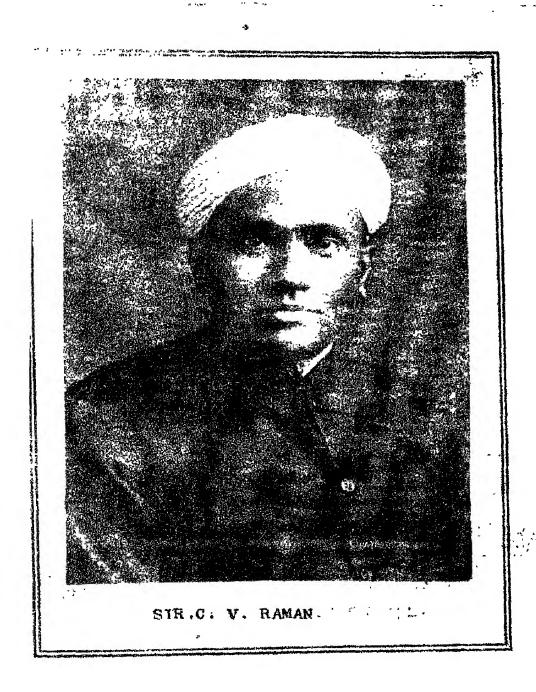
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SIR. C. V. RAMAN.

B I O G R A P H Y [*]

The great Indian Researcher, Sir Chandrasekhar Venkata Raman was born on November 7, 1888, at Trichinopoly, Madras, where his father taught physics in a church college. A few years later, the family moved to Vizagapatam, when the father was appointed as lecturer in the local college. Raman received his early education there until he entered Presidency College in Madras in 1902. He graduated with a bachelor's degree in 1904, standing first in his class and winning the Gold Medal in Physics. By the time he completed his master's degree in physics in 1907, he had already done original work in optics and acoustics, but since at that time there was little scope for scientific research in India, he took the competitive examination for a post in the Finance Department of the government of India. Again he won first place and as a result was appointed assistant accountant general in the central government office in Calcutta.

During the next 10 years, while working in the Finance Department, Raman continued his scientific researches on his own in the laboratory of the Indian Association for the cultivation of science. The importance of his work was recognised by his appointment in 1917, to the first endowed chair in Physics at Calcutta University. He kept this post until 1933.

Raman's years at Calcutta University were marked by great creativity and intellectual excitement, although by western standards his laboratory facilities were meager. Many honours came to him as the significance of his work was acknowledged in India and abroad, as in 1929, when he was invited to do research at the California Institute of Technology. The most tangible evidence of this recognition came in 1927, when the British Government conferred a Knighthood on him, and in 1930, when he was awarded the Nobel Prize.

Raman Effect:

Raman's early scientific interests were centered on phenomena associated with the scattering of light. The most familiar example of which is the effect created when light enters a darkened room through a small hole. The beam of light is then clearly seen because the light is scattered by the particles of dust in the air. That scattered light contained wavelengths in different proportions from the wavelengths of the main beam of light had been known since Tyadall's experiments in 1868, but a fully satisfactory analysis of the phenomenon had not been made.

It was this and related problems that Raman was studying at Calcutta when he discovered that when an intense light was passed through a liquid and was scattered by the molecules in the liquid, the spectrum of the scattered light

showed lines not in the spectrum of the incident light. This discovery was the Raman Effect, which had such great influence on later work on molecular structure and Radiation that Raman was recognized as one of the truly seminal minds on the history of modern physics.

After Raman retired from Calcutta University, he became director of the Indian Institute of Science in Bangalore, where he remained until 1948, when he became Head of the new Raman Research Institute in the same city. Here he continued to guide research and to inspire his students and coworkers. The spoke of his intense enthusiasm and volcavic energy and of his great generosity in acknowledging the contribution of other. According to one former student, he would "give away whole time of research which lesser men would be tempted to keep for themselves.

Raman's attractiveness as a person was rooted in his esthetic approach to science, with his choice of subjects for investigation reflecting his love of music, color, harmony and pattern. He told how his great discovery of the Raman effect was stimulated during a voyage to Europe in 1921, when he saw for the first time "the wonderful blue opalescence of the mediterranean sea" and began to think that the phenomenon was due to the scattering of sunlight by the molecules of water.

Raman influenced Indian scientific development through the Indian Journal of Physics, which he helped found and

which he edited. He was also a gifted popularizer of modern scientific ideas, and he lectured widely to lay audiences. He died in Bangalore on November 21, 1970.

Further Reading

C.V. Raman is listed in the Asia Study Guide (11, A,B,C) Other Indian Scientists were Homi Jehangir Bhabha and Har Gobind Khorana.

Raman gets forth his own views on Modern Science in an attractive way in his The New Physics (1951). Some biographical details and a brief account of his scientific work are in Midstt. dev. Heathcote, Nobel Prize winner in Physics, 1901-1950(1953). A more technical discussion is S. Bhagavantan 'Scattering of Light and the Raman Effect (1940). A consideration of Raman's manysided contribution to science is made by his students and colleagues in Proceedings of the Indian Academy of Sciences, Vol. 28(1949).

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* Raman by Ainslie T. Embree in The McGraw-Hill Encyclopedia of World Biography, McGraw-Hill Book Co. New York.

Courtesy : Mr. B.S. Negi, CES, IIT, New Delhi.

PREFACE

It is our fifth successive effort of celebrating Researchers' Day to pay tributes to great Indian scientists from all disciplines. The progress and success/can be observed by the statement that, only one paper was read in the Researchers' Seminar of 1980, five papers were presented in the Researchers' Seminar of 1981. Collections of nineteen and twenty-four papers were brought out in the Researchers' Seminar of 1982 and 1983 respectively which were presented on that occasion.

NIE Research Fellows Association, NCERT had invited various organisations in Delhi to participate in the Researchers' Seminar of 1984. As a result, six organisations other than NCERT consented for participation. Twenty-four papers have been selected for presentation this year. We acknowledge gratefully the contribution of the participants and respective organisation.

These papers have been compiled under the title "RESEARCHERS' SEMINAR - 1984: Collection of Papers". This could become possible only on receipt of financial and secretarial assistance from NCERT. We are grateful to our Director, Prof. P.L. Malhotra; Joint Director, Dr. A.K. Jalaluddin; Dean(Research), Prof. Atmanand Sharma, Dean (Academic), Prof. B.S. Parekh and Member-Secretary(ERIC), Prof. C.H.K. Misra for the generous help, encouragement and

guidance offered to us time to time whenever sought.

We are highly indebted to Prof. A.K. Jalaluddin, who has kindly consented to inaugurate the Seminar despite prior engagements. Thanks are also due to the Chair persons of various sessions who agreed to our request to conduct the sessions.

The organising committee of the Seminar has been working actively and unitedly throughout the period, also deserve thanks.

The secretarial assistance was also made available all the time for the Seminar work. For which thanks are due to office staff of ERIC, NCERT.

Last but not the least we are thankful to those who directly or indirectly inspired and actively helped in the organisations of this Seminar.

We accept this fact that papers included in this Volume may not be of high quality but still it reflects the solemn and dedicated efforts of biginner researchers to learn 'something'. Our effort is now in your hands. You are the best judge to evaluate. We will gratefully acknowledge your suggestions for/improvement in ourselves.

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C O N T E N T S

PSYCHOLOGY

AND

EDUCATION

A STUDY OF CHOICES OF SCHOOL AND COLLEGE STUDENTS IN RELATION TO THEIR FAMILY INCOME AND FAMILY OCCUPATION

A.D. Tewari and
S.S. Vinayak
DTE, NCERT·
NEW DELHI.

In this study an attempt has been made to explore the effect of family income and family occupation in the career choices of students both from schools and colleges The sample of the study includes 100 school and 100 college students selected from four schools and four colleges in Delhi. Students were asked to respond against questions on their career choice, family-income and family occupation in an open ended questionnaire. Responses given by students were categoried according to eight divisions of National Classification of Occupations (NCO) plus one more for defence service and five family-income categories. Results show that in a specific income group or family occupation category, the proportion of school students choosing a career differs significantly than that of the proportion of college students in some cases while it does not differ in most of the cases. Further, relationship between family occupation and career choice has shown low, but statistically significant (at 05 level) value in case of school students and neglible and statistically insignificant in case of college students.

INTRODUCTION:

It is equally acclaimed by researchers, philosophers as well as laymen that in the social systems we are having in our country, family background factors are significant determinants of the choice of a career by our young children.

In India, students are totally dependent upon their family in respect to the cost of education and other facilities in this regard. Elder family members cater their dependents needs and requirements to the best of their resources. And as a result of which the decisions regarding educational and career choices are largly affected by the family factors.

Hoppock (1967) in his book "Occupational Information" has mentioned that theorist like Clark(1931), Carp(1949); Hollingshead (1949), Mitter and Form (1951), Caplow(1954) and Warner and Abogglan (1955) etc. have given convincing evidence that economical and sociological factors do limit the range of occupations to which a person has careers, do direct his attention to some occupations and away from others, and do affect the occupational distribution of the population.

A number of researchers have been conducted to identify the family influence and educational decision and career choices of students. To restrict this study only to career choice, few studies to mention are:- Dyer (1958),

Stieinke, et.al.(1961), Crites (1962), Knapp and Bedford (1967), Werts (1968), Babelon(1972) and Shoffner and Klemer (1973). They have made efforts to identify parental influence to career choice of students. Parental occupation and career choice of students have been investigated by Sears (1915), Krippner (1963), Lee and King (1964). Hanson (1965), Mawbesian et.al.(1966) and Vignod (1972). Studies on identifying the relationship and effect of social status or social variables on career choices have also been conducted by a number of researches like Anderson (1932), Hall (1950), Galler (1951), Empey (1956), Sewell et.al.(1957), Keiss(1961), Lispet (1966), Calvin (1967) and Tseng (1971).

In Indian setting not much evidence have been avilable to reach at some valid conclusion in this matter. So, this study was therefore aimed at to investigate the effect of family income and family occupation on career choice of students.

OBJECTIVES:

1. to study career choices of students in relation to their family income,

2. to study career choices of students in relation to their family occupation, and

3. to identify the relationship between career choices of students and their family occupation.

HYPOTHESES:

1. family income does not affect significantly to the career choices of school and college students.

2. family occupation does not affect significantly to the career choices of school and college students.

3. career choices of students has no significant relationship with family occupation.

DEFINITION OF TERMS USED:

1. Career Choices:

Various terms have been used synonimously to career choice in Occupational Psychology. They are having difference only in the academic interest. In this study career choices is refered to the occupation of profession or vocation or job the student likes for himself to join after completion of his education.

2. Family Income:

In this study family income is given by the monthly income of the family of the student. The income have been categorised into five groups there are:

1. Income group – I   Upto Rs. 500 pm.

2. income group –II   Rs. 500 to 1000 pm.

3. income group –III   Rs. 1000 to 1500 pm

4. income group –IV   Rs. 1500 to 2000 pm

5. income group –V   Rs. 200 and above pm

3. Family Occupation:

It is refered to the occupation of the family head. Father or elder brother has been taken as the family head

4. National Classification of Occupations (NCO)

It is a revised edition of the International Standard Classification of Occupation (ISCO). In the NCO the grouping of occupation has been done on the fundamental criterian of 'type of work performed'. According to NCO(1968) there are eight divisions with ninety five groups, four hundred and sixty two families and in all two thousand four hundred eighty four occupations. It is beyond the scope of this study to give a detailed account of all groups, families and occupations. Our main concern is with the divisions only which are given below in the Table 1.

TABLE ⅠⅠ

DIVISIONS OF OCCUPATIONS IN NCO *

S.No.	Division	Description
1.	0-1	Professional, Technical and Related Workers.
2.	2	Administrative, Executive and Management workers.
3.	3	Clerical and Related Workers.
4.	4	Sales Workers.
5.	5	Service Workers.
6.	6	Farmers, Fishermen, Hunters, Loggers and Related Workers.
7.	7 - 8 - 9	Production and Related Workers; Transport equipment Operaters and Labourers.
8.	10	Workers not classified by occupations

* Besides these eight divisions one more division.. was formed to cover defence services, as it is to be mentioned that NCO does not include careers in defence services in the Occupational classification.

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This study was conducted on a sample of 200 students 100 each from Delhi Government Boys Higher Secondary Schools studying in $\dots$ ㅎ XII classes and 100 from colleges studying in undergraduate classes in Delhi. Students are male and unmarried. Four schools and four colleges were selected randomly for this purpose.

dure:

Twenty five students from each of the four schools and four colleges selected randomly were administered in groups an information blank. This information blank seeks information regarding background variables, family income, family occupation and career choices of students. Career choices/of students were classified accordingly to NCO divisions for each family income group/were also classified Family Occupation accordingly to NCO classification.

Date thus collected were analysed using percentage analysis, and Spearman's Coefficient of correlation.

<u>Analysis and Interpretation:</u>   In Table-2 the family
income, career choice of school and college students
and critical ratio along with level of significance
of difference between proportions have been given.

It can be seen from Table. 2 that out of 45
C.R. values only 24 C.R. values could be calculated
of which only two C.R. values were found to be
significant at 01. level and only two at 05 level.
None of the C.R. values for income group 2, 4 and 5
were found significant at either level.

Further it can be seen that none of the school
and college students of either family income group
have been shown their choices for the jobs in the
NCO categories 5,6 and 7-8-9. Jobs in these categories
more manual labour is desirel.

In Table 3. family occupations career choices
of school and college students and critical ratio
along with level of significance of the difference
between proportion have been given.

Table 2

Family Income, Career Choice and Critical Ratio for Significance of Difference Between Proportions

Occupation Groups (NCO)	Groups	I	II	III	IV	V	Total
				Family Income (per month)			
0-1	School	3	16	5	6	3	33
	College		1·17 (8)	1·35 (2)	2·04* (3)	1·54 (6)	2·25* (19)
2	School	1	3				4
	College	-3·07** (4)	-1·51 (6)				-3·33** (23)
3	School	1	8	1	2		12
	College		0·36 (5)	-0·53 (2)	0·45 (2)		0·45 (10)
4	School	4	6	3	3		16
	College		-0·49 (6)		1·57 (1)		1·74 (8)
5	School						
	College						
6	School						
	College						
7-8-9	School						
	College						
X	School	6	3	2			11
	College	0·05 (2)	-0·78 (4)	-0·80 (4)			0·23 (10)
D	School	8	8	6		2	24
	College	0·53 (2)	0·23 (8)	0·13 (6)		0·96 (5)	0·69 (20)
Total	School	23	44	17	11	5	100
	College	8	33	18	17	24	100

* Significant at ·01 level   ** Significant at ·05 level

Table 3

Family Occupation, Career Choice and Critical Ratio for Significance of Difference Between Proportions.

Family Occupa. (NCO)	Students	|				Career Choices (NCO)					
		0-1	2	3	4	5	6	7-8-9	X	D	Total
0-1	School	10 1·15	3	1 -1·35	2 -0·78				1 -0·08		17 0·61
	College	3	5	3	2				1		14
2	School	4 0·82	1						1 -0·15		9 1·05
	College	1	4				2		1 -0·15		8 -0·83
3	School	3 0·24		3 0·92							12
	College	2	8	1							7
4	School	3 -2·19*		4 1·34	4					1 -0·78	12 -1·70
	College	6		1						2	21
5	School	10 2·56*	2 0·54	2 -1·67	5 -1·46			6 0·63		14 -0·27	39 -0·29
	College	5	12	5	5			2		12	41
6	School	1		1						1 -0·15	2 -0·42
	College		2		2					1	3
7-8-9	School	1		1						1	4 1·25
	College										1
X	School	1	2 -3·26**					2 0·53			8 1·47
	College		1					1			3
D	School	1 -0·36	2								4 0·00
	College										4
Total	School	33 -0·36	33	12	16			11	10	24	100
	College	19	12							26	100

* Significant at ·01 level.

** Significant at ·05 level.

A perusal of the Table-3 reveals that out of
90 C.R. values only 31 could be calculated of which
only one was found to be significant at .01 level
while only two were at significant 05 level. None
of the school and college students have shown that
career choices for jobs categorised in the NCO
categories 9,6 and 7 - 8-9. In the NCO category
0-1, 2,3,6, 7-8-9 and D r .C.R. Value was found
significant at 05 level even.

Spearman Correlation between family occupation
and career choice of school students, college students
and for the total sample were also computed and found
to be .32, .16 and .25 respectively.   These values
are negligible to low statistically insignificant at
over 05 level(except for school students which is
significant at 05 level.)

Results:

In most of the cases, both for family income and
family occupation career choices of school and college
students, the C.R. Values were not significant. But
still some values were significant at 01 and 05 levels.
This leads to reject hypotheses I & II partially.

Further, the correlation between family occupation

and career choice of school students was low
positive and significant at 05 level; negligible
positive and insignificant for college students
provides reason to partial rejection of the
third hypothesis.

Discussion:

Results of this study reveal that very few
C.R. values were found significant either at 01 or
05 level when career choice of school and college
students in a spefic family income group or family
occupation category were compared. This may be
indicative of findings but larger representation can
give more accurate results. Still it can be seen
that in majority of groups or categories career
choices of school and college students do not
differ.

Relationship between/occupation   family   and
career choice of students reveals that for school
students it is significant at 05 level which
insignificant in case of college students it is
not significant. The significant value is low
and positive. The reason may be less occupational
maturity among school students than college
students.

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INTERACTION BETWEEN STRUCTURES IN CONCEPT LEARNING MATERIAL AND THE PERSONALITY TYPES OF LEARNERS

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ABSTRACT

Present study was aimed at to identify the interaction between concept learning and personality types of learners. A sample of 120 7th grade students were administered an intelligence test. Droping out 30 extream cases in order to egnate intelligence, remaining 90 subjects were administered Junior Personality Inventory. On the basis of mean$+$SSD subjects were divided into three categories for extroversion (E^- , E , E^+) and three for neuroticism (N^- , N , N^+). In each category there were nine subjects. In the final stage three subjects from each category were assigned for teaching through Bruner (1963), Ausabel (1963), and Gagne' (1965) models. Results show that structures in learning material and personality types have significant effect on concept learning, personality variables do interact with learning material.

A concept is a mental image of a thing formed by a generalization from particulars; also an idea of what a thing in general is to be. Russell writes in the Encyclopaedia of Educational Research(1960) " Concepts are learning that 'permeate thinking", and they are marked by "Consistency of differential, generalized, sysmblic response" Vygotsky (1962) considers, "concept as an active part of the intellectual process, constantly engaged on serving communications, understanding and problem- solving." He further points out that, "a concept is not an isolated and changeless formation but it is formed through "the interplay of associations in which all the elementry mental functions participate in a specific combination".

W.E. Vinackle(1973) in his book, "The Psychology of thinking" summarises "A concept is basically a system of learned responses, the purpose of which is to organise and interpret the data provided by sense perception. Past experience is automatically applied to present contengencies through the use of concepts".

Concepts are not particular but classes of stimuli or events. If we were forced to respond to each stimulus we encountered as unique, the complexity of the world would overwhelms Archor(1966) suggests that reducing the complexity of the world takes on the character of string the individual tries not only to reduce complexity in chaotic environment but also" to seek and search out peculiarities and differences in the elements in its environment in order to minimize its environmental complexity."

The learning of concepts, therfore, enables the individuals to grasp in an array of environmental stimuli, similarities and differences which he would otherwise have great difficulty coping with.

Learning of concepts among children depends on many variables and out of those, structuring of task is important. In recent years there has been an increasing amount of attention devoted to structural aspect of knowledge(i.e. knowledge of the conceptual interrelationships in a set of material). Among the possible reasons for the increased level of interest in structual knowledge is a practical one. It appears highly planside that the everyday usuage of knowledge (School learning in job setting) would require some understanidng of the conceptual

interrelationship that exists within a given body
of information. There are many individual differences
which affect student learning: background knowledge,
competence in necessary cognitive skills, general
intelligence, physical disabilities, attitude and
personality; School systems usually take explicit steps in tr
programmes to take account of those but the last two are
generally neglected. The effect of student's attitude
on learning is an important area of research, however,
attitude measures are much less stable than personality
measure. This makes the better a more promising area
of study particularly towards the goal of developing
principles for individualising teaching strategies so much
important and yet lacking in the present educational
system.

The effect of personality variables may further
very depending upon the teaching models used by the
teacher. A teaching model model is a prescription for
for a sequence of moves to be made in the teaching learning
process. These teaching models to teach concepts are
available in research literature which can be fruitfully
utilised by a teacher in individualised teaching.

Burner(1967) formulated his theory of knowledge acquisition, according to which, an individual possesses three parallel models of information processing, namely Eractive, Iconic and symbolic. Burner and his colleagues (1967) emphasize the importance of categories, as a learner seeks to make sense of the diverse stimuli that come from his environment. To use words, we" render discriminately different things equivalent,........ ... respond to them in terms of their class membership rather than their uniqueness."

The effect of these three models through instructional media may not be identical in terms of concept learning as pupils have different types of personality. Two dimensions i.e. Neuroticism/stability and Extroversion/introversion of personality on the basis of Eysenck's theory have been taken into consideration in the present study.

OBJECTIVES

The present study was undertaken with the following objectives:-

(1) To examine the effect of different teaching models on concept learning

(2) To study the effect of extroversion on concept learning

(3) To study the effect of neuroticism on concept learning

(4) To evaluate the interactional effect between structure in concept learning material and extroversion.

(5) To analyse the interactional effect between structure in learning materials and neuroticism.

HYPOTHESES OF THE STUDY

The study was advanced on the basis of the following hypotheses:-

(1) Significant differences in treatment outcomes in terms of concept learning will emerge due to three teaching models.

(2)(a) Extroversion contributes significant differences in treatment outcomes in terms of concept learning.

(b) Significant interaction will be found between structures in learning materials and extroversion causing variation in treatment outcomes in terms of concept learning.

3(a) Neuroticism contributes significant differences in treatment outcomes in terms of concept learning.

(b) A significant interaction will be found between structure in learning material and neuroticism causing variation in terms of concept learning.

There are many teaching models best for the present study there well known teaching models based on the theories of Ausubel, Bruner and Gagne have been used.

According to Ausubel (1963), all learning is meaningful learning. In this theory, the most important principle is called subsumption. Meaningful learning takes place, according to this theory, when a new idea is subsumed into related structure of already existing knowledge. This link is called the "advance organizer", or "Cognitive bridge" (Nevak, 1977).

The second model to be studied is that of Gagne (1965 & 1970). This would pays great attention to an hierarchy of concepts, which, he says are implicit in the discipline being studied (Gagne & Bruner, 1961), Gagne (1962) Gagne & Briggs (1974). Gagne's classification or task analysis is essentially a hierarchical structure which specifies, as its apex, the task to be learned and the subdivision which go to make us the task. The teacher, thus, according to the models designed on Gagne's theory examines main idea to be taught and orders hierarchically all the concepts and skills needed for the attainment of the idea.

DESIGN

The present study has been conducted with the help of factorial design of analysis of variance 3x3 technique involving three teaching models i.e. developed by Ausubel(1960. 1963 & 1969), Bumer(1967) and Gagne(1962 and 1965), and two dimensions of personality i.e. extroversion and neuroticism at three levels each, i.e. n+N and N_ E+E and E_ respectively. Scores of extroverts and neurotics were taken separately while classifying the groups and analysing the data which necessitated a replication of the design(i.e. 3x3) the criterion variable was concept learning.

SAMPLE

Sampling technique was resorted to at three stages. A sample of 120 subjects belonging to 7th grade was taken and intelligence test was administered. To equate the intelligence of all the subjects. Extreme cases were eliminated. At the second stage Junior Personality inventory was administered to the 90 subjects of equal intelligence, on the basis of mean + 5.S.D., subjects were divided into three category for extroversion i.e. E+ E&E_and three for Neuroticism i.e N+ N&N_. In each category there were nine subjects and total was 54.

At the final stage three subjects from each category were assigned for teaching through each model. Hence 18 subjects were taught through each model.

Conclusions drawn according to all the hypotheses are as follows:-

(1)(a) Structures in learning material have significant effect on concept learning.

(b)   Structure in Gagne model produced best outcomes in terms of concept learning and the structure in Brumer's model produced last outcomes.

(c)   High structuring is more effective as compared to less structuring.

(d)   Higher is the structuring in learning material, greater is the acquisition of the material.

2.(a) Personality has significant effect on concept learning.

(b)   The performance of intrevents on concept learning was better than the extrovents as well as average subjects.

(c)   The performance of Group 'E' on concept learning was best and of 'E$^+$ was wrost.

2(b) (a) Personality types of students do interact with structures in learning materials.

(b)   Subjects taught under Ausubel's model performed better on concept learning than the introverts.

(c)   In group taught under Gagne's model performances of introvecets was better than the extraverts.

(d)   In group taught under Bruner's model there was no significant differences between the performance of extravets and introvects.

3(a)(a) Personality is a significantly effective variable.

(b)   Neutrotics performed better than the stables.

(c)   The performance of group N$^+$ was best and of group N_ was least an concept learning.

3.   Personality variables do interact with structures in learning material.

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JOB SATISFACTION AND NEVROTICISM

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A BS T R A C T

The aim of the present study is to study the relationship of job satisfaction and neuroticism among skilled and unskilled workers. A sample of 200 male writers were administered. A Job satisfaction scale twenty three and 28 high job satisfied (HJF) and 28 and 22 low job satisfied(LJF) subjects were identified from skilled and unskilled workers, respectively. These groups were then administered Moudoslay Personality Inventroy to measure ⋅⋅⋅⋅⋅⋅ mood stability. Resluts show that age and educational qualifications are not related with job satisfaction while job experience and number of dependents are related with the same.

INTRODUCTION

Job satisfaction is a positive feeling towards the job
in which one is engaged. Locke(1976) defines it as " a
pleasureable or positive emotional state resulting from the
appraisal of one's own job experience." Many researches has been
conducted on job satisfaction, but Herzberg et all (1959) have
significant contribution in the field of job satisfaction. They
classified it into two factors—hygienic and Motivational factors.
Hygienic factors—related to job environment and comprised of
pay, company policy, technical supervision, interpersonal
relationship with colleagues, supervisors and juniors, status
security, working conditions etc. second category related with
the job itself constituted of recognition, advancement,
achievement, responsibility etc.

Further, he found that motivating factors like work
itself, advancement, recognition, responsibility etc. were major
factors contributing to job satisfaction and their absence
would not lowere down satisfaction. The factors classified
as hygienic factors like technical supervision, working conditions
company policy etc were examined as the causes of job satisfaction
with little potentiality to let job attitude rise in the
positive direction.

Waters and Waters(1969), Julin (1971), Wall (1973) has
criticised the generality of the theory. They condemned it
on the basis of methodology and reliability of the research
tools Porter(1961) stressed over the need of the individual

The individual gets gratification only by need fulfilment
through his job.

Neelay (1973) also has hypothesised that the individual
gets job satisfaction through the satisfaction of lower needs
if the subjects are not, or frustrated from them. It needs
towards dissatisfaction if the subjects lower needs are
gratified, he will get satisfaction by gratifying the
higher need.

But if we think rationally we can hypothesised that
neuroticism also contributes to job satisfaction. The present
study is an attempt to study the relationship of neuroticism
and job satisfaction among skilled and unskilled workers and
relationship between age, educational qualification, number
of dependents and work experience have also been studied with
the job satisfaction.

Method of Study.

Tools used: 1. Job satisfaction Scale

2. Moudeslay Personality Inventory

Sample   The sample of the present study constitutes of 200 male
workers (100 skilled and 100 unskilled). They were selected
randomly from Vinod Paper Mill and Airhart Spinning Mill of
Malerkotla(Punjab). The investigators themselves constructed
the five-point scale to measure the job satisfaction.

3.4.

Procedure: The subjects were administered job satisfaction scale. High job satisfied(H.J.S.) and low job satisfied(L.J.S) from skilled and unskilled group were selected i.e. skilled group:23 highly satisfied and 18 low job satisfied, unskilled group 28 H.J.S, and 22 L.J.S. These subjects were administered maudeslay personality Inventory to measure the neuroticism and stability. The investigators analysed only those questions of this inventory which are related with neuroticism and stability. For computation of demographic variables(age, educational qualifications, number of dependents and work experience), Chi-square technique is used and for computing relationship between job satisfaction and jeuroticism, 't' value is used:

RESULTS

AGE: SKILLED WORKERS   Table -1

	20-35 years	36-50 years	51 years & above
H.J.S.	10	6	7
L.J.S.	8	4	6

$X^2 = 1.32$ insignificant at .05 level

Table -2

	20-25 years	36-50 years	51 -above yrs
H.J.S.	6	12	10
L.J.S.	10	8	4

$X^2 = 1.76$ Insignificant at .05 level

Table 3

WORK EXPERIENCE: SKILLED WORKERS

	3-5 years	6-8 years	8-above yrs.
H.J.S.	12	3	8
L.J.S.	3	3	12

$x^2 = 6.20$ significant at .05 level

Table -4

UNSKILLED WORKERS

	3-5 years	6-8 years	8-above yrs.
H.J.S.	14	6	8
L.J.S.	4	6	12

$x^2 = 6.40$ significant at .05 level

Table -5

EDUCATIONAL QUALIFICATIONS : SKILLED WORKERS

	Illitrate	Under Matric	Matric & above
H.J.S.	8	8	7
L.J.S.	6	4	8

$x^2 = .48$ insignificant at .05 level

Table-6

UNSKILLED WORKERS

	Illitrate	Under Matric	Matric & above
H.J.S.	12	9	7
L.J.S.	8	8	6

$x^2 = 1.48$ insignificant at .05 level

3.6.

Table-7

NUMBER OF DEPENDENTS: SILLED WORKERS

	2-4	5-7	8 above
H.J.S.	14	5	4
L.J.S	5	3	10

$X^2 = 9.30$ significant at .05 level

Table-8

UNSKILLED WORKERS

	2-4	5-7	8 & above
H.J.S.	12	10	6
L.J.S.	4	6	12

$X^2 = 1.79$ significant at .05 level

Table -9

Mean of Scores of neuroticism of H.J.S. Group	Mean of Scores of neuroticism of L.J.S. group	t
SKILLED 52.40	25	3.10*
UNSKILLED 64.90	50.4	3.25 *

Significant at .05 level

DISCUSSION:

Job Satisfaction is the result of on-the-job and off-the job factors. Neuroticism is a characteristices of human behaviour, which influences and diffcrt the view towareds job experiences. Results discussed above are following.

3.7.

Table Nos. 1,2,5 & 6, show that age and educational qualification are not related with job satisfaction among skilled and unskilled workers, these results are supported by the studies conducted by Natraj & Hafeez(1965), Sinhas and Nair(1965) and Rao(1970).

Table Nos. 7,8,and 3, 4 shows that work expereience and number of dependents are related with job satisfaction Sinja & Sharma, Sinja and Nair, Cosh and Shula has not found out no relationship between number of dependents and job satisfaction.

Here in this study we find job experience is related with job satisfaction whereas age has no relationship with job satisfaction. These results do not contradict each other. In fact, this contradiction is more illusory rather than more revealing. It points out that more expereinece on the job may may mean more expeience. We have to keep in mind that these job expeience are not the two facts of the same coin. What is true for job experience may not be true for age.

Table No. 9r ₃that significant difference exist between mean neuroticism scores of HJS and LJS persons for both the skilled and unskilled group of workers.

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RELATIONSHIP OF INTELLECTUAL DEVELOPMENT WITH ACHIEVEMENT OF XI GRADE SCIENCE STUDENTS

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ABSTRACT

This Piagetian developmental psychology based study,
aims at to study the intellectual development of adolescent
pupils in relation to their academic achievement in different
science subjects. A sample of 265 XI grade students in the
age range 15 years - 17 years were administered Raven's Verbal
Reasoning Test. Achievement in Science subjects were recorded
from their Board examination marks. Results show that
significant and positive relationship exists between
total scores of intellectual development and achievemennt
scores in science subjects and in total achievement scores
for both boys and girls.

The researches in the development of intellect of
children are gradually becoming an important area of concern
for education and psychology. Cognitive development work is
always associated with Jean Piaget, the chief advocate of
Geneva school of thoughts. The abstract thinking or as Piaget
has termed it formal operational thinking is characterised by
the ability to go beyond, concrete reality to the hypothetical
all possible combinations of events, either real or possible
are considered in an exhaustive way and emperial proof can be
offered. Problem both real and hypothetical can be conceptual-
ised. He further asserts that children of 15 to 17 years of
age attain formal operational thinking or reasoning abilities
to solve any problems related with personal and life. He has
defined four stages of cognitive development the sensori-
motor, pre-operational, concrete and formal stage.

Adolescent pupils shows a wide variety of intellectual
behaviours, while conformted with those problematic situations
which do not require any specialised knowledge for their
solutions. So education for understanding and problem solving
is gradually becoming the chief goal of instruction in our
times. The role and need of logical thinking in science
learning being different from repeatable knowledge as the
primary focus in the classroom to as a focus on what the
students are doing cognitively (the mental operations involved)
and how students feel about it.

in the present piece of work the investigator was
especially interested to study the intellectual development
of adolescent pupils in relation to their academic achievement
in different science subjects viz. Physics, Chemistry, Biology,
Mathematics. It was thought the mental structure or logical
operationa developed during adolescence, help in better
understanding of science subjects. Since these subjects very
widely in dealing with simple to abstract concepts, The range
of complexities of concepts can be classified in subjects as
Physics, Mathematics, Chemistry and Biology. In other words,
the teaching of these subjects may either hinder or facilitate
the intellectual development of the adolescent pupils.

Purpose of the Study:

The present study was undertaken with the following
objectives.

1. to study the proportion of science adolescent students
   at concrete, transitional and formal operational levels
   of Intellectual Development.

2. to study the extent of relationship between scores of
   intellectual development and academic achievement in
   science subjects, viz., Physics, Chemistry, Biology,
   Mathematics and grand total of marks of boys and girls
   science adolescent students.

3. to study the extent of relationship between achievement
   in science subjects and stages of intellectual develop-
   ment (Concrete, Transitional and Formal).

RESEARCH HYPOTHESES

1. Majority of the science adolescent students are at formal operational levels of intellectual development.

2. There is no significant relationship between intellectual development and achievement in science subjects.

3. There is no significant relationship between achievement in (1) Physics (ii) Chemistry (iii) Biology (iv) Mathematics and (v) total achievement scores and levels of intellectual development in boys and girls adolescent students.

The Sample

The sample for the present study was consisted of 265 (139 boys and 126 girls) students (age range 15-17 years) drawn randomly from 6 Higher Secondary Schools of Ajmer City. Only such schools were selected where the science is taught as optional group and the medium of instruction is Hindi.

Tools: Measure of Intellectual Development

The measure of intellectual development was obtained on Raven's Verbal Reasoning Test. This is paper pencil test and logical operations were identified from an analysis of the growth of logical thinking (Inhelder and Piaget, 1958, 1964).

Measure of Academic Achievement

The measure of academic achievement in science subjects (Physics, Chemistry, Biology and Mathematics) was based on the marks obtained by the students in secondary school examination.

conducted by Board of Secondary Education, Rajasthan, Ajmer.

Collection of Data:.

Data for the study was collected systematically and sequentially keeping in view all the instruction supplied by authors in their manual.

Analysis & Interpretation of Data

The basic purpose of the present investigation was to find out the extent of relationship of intellectual development with achievement in different science subjects of the higher secondary science students belonging to both sex and different types of schools.

In the present study, Raven's Verbal Logical Reasoning Test was used to classify the sample population into three levels of mental development, that is, concrete 'ransitional and formal operational levels.

The proportion of science adolescent students reaching at Concrete, Transitional and Formal levels of intellectual development was computed in percent and area presented in Table-I.

TABLE-I

Distribution of Science Adolescent Students at
Different Levels of Intellectual Development

S. No.	Group	Type of School	N	Concrete Level %age	Transit- ional Level %age	Formal Level %age
1.	Total Sample	Boys and Girls Schools	265	12.45	69.81	17.74
		(i)Govt. Schools	91	17.58	67.03	15.38
2.	Boys	(ii)Private Schools	48	4.17	66.66	29.16
		Total	139	12.94	66.92	20.14
3.	Girls	(i)Govt. Schools	85	14.11	70.06	15.29
		(ii)Private Schools	41	7.31	78.06	14.63
		Total	126	11.90	73.01	15.07

Column headers: Science Adolescent Reaching at.

Table I given above presents an overall idea of the actual levels of attainment of the study sample at different levels of their intellectual development. At glance, the following trends can be observed:

(1) Majority of the science adolescent students, say 70% are at the transitional levels of intellectual development.

(2) Only about 18% of the total population are found at Formal Operational levels of Intellectual Development.

(3) About 13% of adolescents still remain at concrete operational thinking level.

(4)   Regarding the sex-differences, it can be observed
      that boys lead in their attainment of Formal Opera-
      tional thinking level (20.14%) than girls(15.0%).

(5)   Percentage of girls reaching at the Transitional
      level of intellectual development is slightly
      higher (73.01%) than the percentage of boys (66.94)
      reaching at the same level.

(6)   There is no difference in percentage of boys and
      girls lying at concrete level of the intellectual
      development.

Interrelationship between Intellectual Development and
Achievement in Science Subjects

       Table-II given below summarises correlation between
scores of intellectual development and academic in Physics,
Chemistry, Biology, Mathematics and grand total of marks. The
achievement scores were the marks secured by the sample subject
in secondary school examination, conducted by Board of
Secondary Education, Rajasthan. The grand total of marks is
the total performance of the children in all subjects
including subjects for general studies.

TABLE-II

Correlations Between Achievement in Science
Subjects and Total Achievement Scores and
Scores for Intellectual Development

S. No.	Subjects	Boys			Girls		
		N	'r'	Level of Sign.	N	'r'	Level of Sign.
1.	Physics	139	0.801**	.01	126	0.397**	.01
2.	Chemistry	139	0.850**	.01	126	0.168	NS
3.	Biology	41	0.374**	.01	100	0.277**	.01
4.	Mathematics	92	0.631**	.01	26	0.456*	.05
5.	Total Achievement	139	0.707**	.01	126	0.389**	.01

NS = Not significant

* = Significant at .05 level

** = Significant at .01 level

At glance, in the above Table all correlations except one or two are highly significant at .01 level of significance.

The correlation between scores of intellectual development and the scores in Physics are 0.801 and 0.397 for Boys and Girls respectively. Both correlations are significant at one percent level of confidence. Similarly, the correlations between intellectual development and achievement in Biology subjects are highly significant (.01 level) the correlations between achievement in Chemistry subject and the scores on Intellectual Development Test is 0.850 for boys adolescent

which again is highly significant. Only the correlations
between achievement in Chemistry and intellectual development
for girls found to be 0.168, which is insignificant. The
correlations between Mathematics subject and intellectual
development are signfficant for both boys and girls, But,
it is highly significant (.01 level) in case of boys than
girls (.05 level). The correlations worked out between grand
total marks and scores of intellectual development are also
highly significant (.01 level).

These results indicate the significant and positive
relationship between Intellectual development and Achievement
in science subjects. Thus the hypotheses No.2 is rejected.

Interrelationship between Achievement in Physics, Chemistry,
Biology, Mathematics and Total marks and Formal Transitional
and Concrete Operational Thinking

The next step was to find out the relationships between
each science subject and grand total of all subjects with
different places of development viz. formal, transitional
and concrete operational thinking. The correlation values
along with significance have been given in Table-II.

TABLE - III

Correlations between Achievement in Physics,
Chemistry, Biology, Mathematics and Total
marks and Concrete, Transitional and Formal
Operational Thinking

Subject	Operational Stage		N	r	Level of Sign.	N	r	Level of Sign.
			BOYS			GIRLS		
Physics	Concrete		18	0.124	NS	15	0.377	NS
	Transitional		93	0.321**	.01	92	0.271**	.01
	Formal		28	0.310	NS	19	0.336	NS
Chemistry	Concrete		18	0.217	NS	15	-0.170	NS
	Transitional		93	0.573**	.01	92	0.516**	.01
	Formal		28	0.279	NS	19	0.462*	.05
Biology	Concrete		7	-0.442	NS	12	0.216	NS
	Transitional		32	0.286	NS	73	0.031	NS
	Formal		8	0.013	NS	15	0.172	NS
Mathematics	Concrete		11	0.445	NS	3	0.341	NS
	Transitional		61	0.922**	.01	19	0.012	NS
	Formal		20	0.209	NS	4	0.494	NS
Total	Concrete		18	0.421	NS	15	0.314	NS
	Transitional		93	0.181	NS	92	0.035	NS
	Formal		28	0.235	NS	19	0.178	NS

NS   = Not Significant
*   = Significant at .05 level
**   = Significant at .01 level

Entries in Table-III are self explanatory still need some elaboration. It is clearly shown that no significant relationship between biology marks and total achievement score and different levels of intellectual development. However, significant relationships between Physics, Chemistry and Mathematics(only for boys) achievement and only with transitional level of intellectual development were obtained. Thus the hypothesis no.3 is accepted in case of the relationship between levels of intellectual development and Biology marks and total achievement and rejected in case of intellectual development and achievement in Physics, Chemistry and Mathematics marks.

Conclusions

From the results obtained above by analysis and interpretation of data, the following trends can observed.

1. A Significant and positive relationship exists between total scores of intellectual development and achievement scores in science subjects viz. Physics, Chemistry, Biology and in Total achievement scores for both boys and girls science adolescents students.

2. The obvious trend between achievement in science subjects (Physics, Chemistry, Biology and Mathematics) and concrete and Formal operational thinking levels of intellectual development is that of no relationships. In other words, No relationship is found to exist

between scores of achievement in science subjects and
the scores for stages (Concrete and Formal) of intelle-
ctual development.

3. A high and significant relationship is found between
   achievement in science subjects and transitional
   operational thinking stage of intellectual development.

The finding of no relationship between achievement in
science subject and concrete and formal operational thinking
was not suprising. As has been reported earlier, concrete
operational thinking comprises of classification, seriation,
logical multiplication and compensation abilities and whereas
Formal operational Thinking consists of Proportional, Probabi-
lity and Combinatoral abilities. The Achievement tests in
Science subjects do not hinge on these operations but are
based by and large measure K-R, translation, interpretation,
analysis etc. (in Bloomian sense). Therefore, looking to the
test contents of these two kinds of test materials, one
would predict that in general no relationship should exist
between achievement in science subjects and concrete, formal
operational thinking abilities.

However, the discreant relationship between achievement
in science subjects and transitional operational thinking is
difficult to explain. More studies should be conducted either
to confirm or refute this.

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PERSONALITY PATTERN OF
OVER AND UNDER ACHIEVERS

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ABSTRACT

In the present study standard progressive Matrices was administered on a sample of 172 VIII Class students (86 boys and 86 Girls) Academic achievement students was ensured by calculating average of the marks of the terminal examination. Scores on SPM marks in the two terminal examination were converted into Z scores and on their capability overachievers( )underachievers(35) were identified. The sample of over and under achievers were than administered Parsi Panchayat Personality Inventory. Results show that over and under achievers do not have different personality patterns as is popula believed.

INTRODUCTION

Pupil achievement in a school system is a pervasive. It indicates what the pupil achievers by studying the curriculum in terms of information understanding skill improved reasoning ability apprehending future needs problems and preparation for meeting those needs adequately and developing such abilities and attitudes as would equip the learner to function effectively in his society. If achievement is given such comprehensive Meaning the concept would be such that the life goals and aspiration of the individual learner should be reaslised by studying the context and in turn the evaluation procedure should be comprehensive enough to enable the evaluation to judge the ability of the Learner in connection with all the aspects such as cognitive, Conative and effective developed by studying this prescribed content.

At present the achievement is limited to the pupils ability to gather information a little bit of understanding and reasoning ability. It is believed under normal conditions. Students will achieve academically at nar with their intellectua standing as measured through tests of general intelligence. From the foregoing notion of intellectual ability contributing towards scholastic achievement stem out two other concents. One is over achievement pupils whose academic achievement is higher than the expected achievement on the basis of intellectual standing are called over achievers. Second is under achievement, pupil whose academic achievement is lower than the expected achievement on the basis of intellectual

standing are call ed under achievers. The expectation
that a pupil would achieve academically as par his intelle-
ctual ability seem to be over simplification of complex pheno
men ce of mental functioning where in motivational factors
and other environmental factors must be intervening either
as boosters on impeders. A probe at the intervening factors
may reveal ways and means as regards counter acting the
de triment al influence of such factors, If any/one on hand and
furthering and strengthing contributory factors on the other
Such probe should be best carried on an individual basis
which is time consuming and would require much of resources,
If on the other hand a pattern of characteristics is determ-
mined for ever and underachievers than the characteristics
which inveriably improve achevement may be located, and furth
it may be possible to introduce new motivational factors
to cite interest and create readiness for better achievement
at differmt levels of schooling.

Since personality characteristics do not activate the
as issolated traits, it is desireable to study
the pattern of traits for providing motivation for academic
pursuits and improved achievement.

What should be the specific approaches for creating
learning situation, pupil engagement way of instruction-
mode of evaluation will be largely dependent on the
characteristics of the learner. Hence homogeneous
grouping of learners will be based not only on the ability
factors but also on that personality characteristics

and environmental accompariments too.

OBJECTIVES - Specifically stated as:

* Identifying the extent of under and over achievement

* Studying the personality Characteristics of over and under achievers

* Visualising the personality characteristics which ensure sustained effort as in case of over ahcievers.

* Determining such Characteristics as cause d' '' '' 'n from academic pursuit.

* Recommending instructional methods for , '' '' ', distracting impulses afficating the under achievers.

* Recommending learning situation that would sustain the effort made by over achievers.

* Recommending approaches and methods for improving methods of instruction and development of intensive study habits.

_ Methodology _ Sample and tools used

Standard Progressive Matrices was administered on a
sample of 172 students(86 boys, 86 girls) from co_educational
and single(both boys and girls) schools from both rural and
urban areas in and near BHUBANESWAR.   The students belonged
to class VIII.   Academic achievement of the students was
determined by computing the overage of their aggregate marks
in two consecutive terminal examinations.   The raw score
obtained by each student on Raven's standard Progressive
Matrices and his average aggregate marks was convereted into
'Z' scores to establish comparability between intellectual
ability and academic achievement.   A discrepancy of one
standard score or more has been taken is the criterian for
levelling a student as underachiever or over_achiever.   In
other words if the achievement Z score is less than the Z
score on SPM.   By one or more than the student is taken for
underachiever and the reverse is the case for levelling
one as over_achiever.

Parsi Panchayat Personality Inventory has been
administered on 24 over achievers and 26 under achievers.   The
rest 7 over_achievers and under_achievers were absent.   The
Inventory which was standarised on a small sample consisting
of 232 boys and 184 girls belonging to 7 Boys High School
and 9 girls High School in Urban at Bombay in the year 1960.
The test consists of 72 items having six personality
dimension like, Extraversion_ Intreversion, Sociability,
Emotional stability, Neurotic tendency, Domiance_submission,
verbal meter

- Analysis and Findings-

Incidence of both the over and under achievers was about one fifth of the toral grop number. Over achievers 18.02% and under achievers 20.35%. Over achievement in the maximum at Lower intellectual level, under achievement accured normally at normal intellectual level.

There is little stress on utilisation of intellectual prowess with more emphasis on Memory work. A further probabillity is that the students physical and social environment is not enriched enough to cater to the need of one to hold the interest of students of higher intellectual level. Underachievement accuring mostly in the higher intellectual level may be interpreted as giving way to .... from avademic pursuits. Students of higher intellectual level one perhaps not being able to utilise their talent. If this might be the case for pupils of higher intellectual level, then there is an urgent need of a change in centent and teaching methodology suited for higher intellectual level. Another interesting episode is noticed that 25 boys are underachievers as against to 10 girls underachievers, on the otherhand girls over achievers numbered 19 where the boy over achievers are 12. The reason is plain and conspicuous, the boy in our social situation are more open to distraction from which study than girls.

The propduct mement correlation between intellectual level based on P.P.M. scores(Z scores) and

academic achievement level of 172(86 boys and 86 girls)
happened to be. 30 which is positive and closely corres-
ponds to that found by Alfred Binep that is 27.

In the administration of Parsi Panchayat personality
Inventory the obtained rows scores have been weighted
as per the direction described in the manual. Mean
weighted score of under achievers and even achievers.
Boys & Girls separately and combined have been calculated
and the statistical significance of mean differences between
the over and under achievers have been calculated for each
personality dimension measured by the test. It may be seen
that mean difference is not significant in c ase of 5 dimen-
sion but significant in case of dominance-submission dimension
to the order of 0.01 level only in case of boys that is boys
overachievers tending significantly to be more dominant
than boys under achievers. Lastly it is seen that actually
over and underachievers do not have different personality
patterns as is popularly believed. What to speak of persona-
lity patterns causing over and under achievement.
CONCLUSIONS- It is seen from the above discussions that
traits like extroversion, sociobility and dominance becoming
higher in case of over achievers. The following conclusions
can be drawn:

Learning situations in intellectually stimulating physical
environment may be provided- Intelligent students may be taken
into field trips to real work situations. say industries,

agro_ industries, demonstration plots, homefare stay

gelogical survey situation, operation table to see

demonistration of complex body functioning. Night classes may

beorganised to observe the movements of the stars they may be

taken into observations to learn more intricate matters

regarding heavenly bodies. In case of Lack of such

intellectually stimulating physical environment simpler subjects

like a cart a wheel, a plain and curved surface, an inclined

plane shape of objects etc. may be exposed to the students

illustrating the principles of dynamics and chemistry of

objects involved in their working.

_ Improving social environment_ the underachievers being

socially shy theirmmy be provided with social situation in the

school situation, such social relations established in

school situation may be made more intimate. Formal relations

should be discouraged. Joint undertaking and assignments of

challenging character may be useful in this direction.

Our social system are yet to restructure their content timing

evaluation system methodology etc. for materialising such

goals.

Some earlier studies both ceroberating and contradicting

the findings of the present investigation.

Tondon.S.(1978) B.H.U. concluded in his study that the male

group of underachievers were easy going and out going,

emotionally less stable, low in frustration, shy, apt to

inferiority feeling, indifferent, pessimistic, moody, depressed

and highly anxiouas female group of under_achievers were found

to be peassimistic.

harash, assentive and highly anxious.

Menon, S.K. Kerala University(1972) study revealed that overachivering groups of boys and girls of superionability as well as the general group were found to be less socially active and masculine.

Bhaduri A. Calcutta University(1971) Pointed out that the over and /achievers within each sub-sample differed on over
under
one or more of the twenty six variables under study. A variable wise showed a certain degree of stability in and anxiety. Over-achieving students tended to be less neurotic and less anxious than the under achievers, the group difference was in favour of the over-achievers on social service and out-door interests.

Bhatt.K.K. University school of Psychology-Gujarat-1971
 that on the ISB, the under achivers showed a relatively better level of adjustment than the over achievers. Content analysis revealed that the difference in the emotional sensitivity of the overachievers and underachievers. and underachievers was a contributory factor from this discrepancy.

 this stage of concluding the report, the investigator is very much troubled as in view of the findings there is occasion to cast doubt on the very concept of underachievement and over achievement based on intellectual ability. If at all such concepts will be tanable the intellectul ability of the pupil will be fully utilised by the instruction and evaluation

procedures employed in ghe school situation and the content

will be such that intellectual goals will be fully realisable.

That way the investigator dares to talk tall by suggesting

a thorough restructurisation of the current school education

system as took place in speedly developing countries like

China, middle-easts, Tanzania etc., this is a task which needs

urgent attention and requires combined effort of administrators

organisens, teachers, parents, philanthropic agencies and

general public.

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INTELLIGENCE AND REACTION TIME COMPARISION BETWEEN GOVERNMENT AND CONVENT HIGH SCHOOL STUDENTS

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A B S T R A C T

The study aimed in finding out if there exist any relationship between simple reaction time to a visual stimuli and intelligence as measured by Raven Standard Progressive Matrices(1960) of the Xth Grade students and the extent to which the Government and Convent high School students differ on these two variables.

6.2.

The simple reaction time approaches and RPM were
administered on a sample of 100 Xth grade students 50
from Government high school and 50 Convent high school at
Fariadabad. Results shows that convent high school students
are better on both reaction time and intelligence than the
Government School students, and there exists a definite
relationship between the two criterian variables.

The study of reaction time and intelligence is one of the
earliest problems to be taken up experimentally by the
psychologists. Speed of time have its own significance in every
field of science. Every act takes time and time can be
measured. Speed in both an index of achievement and also an
index of complexity of minor processes giving on. The
complixities of minor processes, i.e. mental processes, certain
neurological processes and cognitive processes involved in
various intellectual tasks delays the excention of a
particular task if the individual have not been able to
master that task. In contrast if the individual has mastered
the task mofe adequately, he can perform it moremastered the
task more adequately, he can perform it more quickly, and
accurately. Thus the reaction time can be

considered as an index of mental development or cognitive development and capacity or efficiency to reason well. If a person's inner processes are not appropriate or are distorted there is more chance that his mental development will be arrested. The reaction time is the S - R time interval. The response can not come out of the organism as soon as the stimuli disappears. A process starts after the removal of stimulus, and this process remain sudden or 'latent' inside the organism till it reaches the muscles and produces an observable effect on the environment. The sense organ must be aroused to activity, the nerves must conduct to the brain and from the brain to the muscles, and the muscles must contract. This physiological process involved in the execution of response to any stimuli is very much affected by certain psychological factors among which intelligence or cognition is one. This physiological process is not merely affected by intelligence, but the end product of it (reaction time) is also the manifestation of our individual's mental development.

Review of Research:

An extensive review of studies conducted on school students and other samples, taking reaction time and intelligence as criterion variables along with other variables such as SES, birth order, family size etc. have shown that while in some of them a definate correlation

has been found, in others very low correlation exist
between reaction time and intelligence. Scott, W. C.
(1940), in order to determine whether children with high
I.Q. differed from that of with low I.Q., on R.T. administered
Stanford-Binet Intelligence Scale to 51 children with I.Q.
range of 60 to 94 and found that children of I.Q. were
faster and were more consistant in reaction time than those
of low I.Q. on the basis of results he suggested that the
relationship between I.Q. and R.T. may be curiviliner,
Pomeroy, J.E. (1938) in a study conducted on a sample of
50 boys and 50 girls aged 5½ years and 25 women with man
age of 22.9, found low positive correlation between auditory
reaction time and I.Q. He found small unreliable sex differences
on R.T. in favour of the boys.

Arundt, S. and Berger, D. (1978) conducted a study on
24 male graduate students from the fields of sculpture,
psychology and law, to test the assumption that an individual's
cognitive mode is related to actual laterality in cerebral
functioning. A measure of asymmetry of cognitive mode for
each student based on relative performance on three verbal
analytic tests, viz: WAIS - Block Design, The Extended Range
Vocabulary Test and The Word Power Questionnaire, compared
to three spatial - holistic tests, viz; The Street Gestalt
Completion Test, ETS Gestalt Completion Test and the Collin's
Test were taken. He found that the RT to discriminate focus

were less for the right hemisphere, while letters were
discriminated faster by the left hemisphere and there was
negative correlation between the I.Q. tests and R.T.

Lunneberg, C.E. (1977) describes three studies of 191
high school university students in which choice - R.T. was
related to such psychometric abilities measures as verbal
comprehension, numerical reasoning, hidden figures and
Raven's Progressive Matrices serves. Fairly negative
corelation between RT and IQ on these tests was found.

From the above mentioned studies it is evident that
there is either negative or low positive relationship between
reaction time and intelligence.

Regarding the differences between Convent and Government
school students, there is no direct evidence of differences
between the two on reaction time and intelligence. But the
indirect evidences are available from the studies conducted
for finding out the impact of SES on reaction time and
intelligence. For example in 1970, Kanji, C and Rabin in a
study conducted on a sample of 105 children whose man age
was 3½ years, found that the different socio-economic
status groups of the several mental ability on Stanford-Binet
Intelligence Scale have different cognitive abilities.
Orv, D.E. and Das, J.P. (1973) also confirmed the impact of

SES on I.Q. in their study, in which they combined high and low SES subjects with average high - low I.Q. levels subject to select in groups of 30. The results suggested a definite impact of SES on intelligence. All these studies pertaining to the influence of SES on intelligence are mentioned here keeping in mind the fact that convent and Government school students, as found in the present study, differ with regard to their father's educational level, father's occupational level, father's monthly income and the facilities available at home. All these wishes indicate an individual's family's socio- economic status.

Method

The analyses reported in this paper pertains to the relationship between reaction time to a visual stimuli and intelligence and the comparision between two groups of students differing on socio-economic status on the two criterian groups, i.e. intelligence and reaction time. The earlier studies on the relationship between reaction time and intelligence and the impact of SES on the two provide the scientific rationable for conducting the study. The data on intelligence was collected by administering the Raven's Standard Matrices (1960) in groups, and in reaction time the data was collected by employing the simple Reaction Time Apparatus.

The information regarding the SES of students, they were asked to mention their father's education, occupation, monthly income, size of family and the articles such as TV Radio etc. available at home, on a separate sheet of paper.

The two hypothesis tested in the present study were (i) that there exists a definite positively indicative relationship between intelligence and reaction time, (ii) that there exists a significant difference between Government and Convent School students with regard to there intelligence and reaction time.

The Population:

The population of interest was Xth grade school chr students in Faridabad (Haryana). The two schools taken-up for the selection of sample were situated in Faridabad, on a distance of 5 km. from each other.

The Sample:

The sample constituted of two group of male students of Xth Grade of 50 each. The students, for the study were selected by following the technique of random sampling. In Government High School out of 81 students 50 were selected similarly in Convent High School our of 60 students, 50 were selected.

The Characteristics of the sample can be seen from the breakdown given in Table 1.

T A B L E 1.

Breakdown of the Sample by Mean Age, Income & SES

Groups.	N.	Mean Age	Average Monthly Income	Average Family size	SES (As Estimated)
Govt. High School Students.	50	14.10	Rs.615/-	5.8	Low-middle
Convent High School Students.	50	14.10	Rs.1,640/-	2.2	High

Variables:

The independent variable was the two group of students Convent and Government school students. The two groups were compared in two criterion variables, namely reaction time and intelligence. Ten readings of reaction time to a visual stimuli were noted down and the average of these were used as scores on this variable. The scoring on Raven's Standard Matrices was done following the manual of the scale.

SES was one demographic variable, regard to which the two groups differed to a substantial amount. An overall index of SES could not be chalked out as information on various

other indices of SES was no available. But it was the
general observation that the two groups were not at all
match to each other on this particular variable.

Data Analysis, Results and Discussion

**Relationship Between
Intelligence & Reaction
Time:**

Applying the statistical technique of Product Moment
Correlation, for finding out the relationship between inte-
lligence and reaction time for the two groups separately,
the results summarised in Table 2 were found.

T A B L E 2

Relationship Between Intelligence & Reaction Time.

Groups.	r
Government High School Students.	−.25
Convent High School Students.	−.47

The results in the table indicate that the relation-
ship between intelligence and reaction time of the Government
high school students is −.25, which although is low but

indicative of definite relationship between the two
criterian variables. Here it is worth mention that the
negative relationship between reaction time scores, which
if high suggests low mental ability and the intelligence
scores, indicates the positive relationship. The correlation
value in case of the Convent school students is -.47 which
again suggests the positive relationship. From the results it
can be interpreted that the students who are of high
intelligence are faster in their visual reaction time, and
the students with low intelligence are slower in their
reaction time than their counterparts. This confirms the
hypothesis that the reaction time of an individual is
indicative of his mental capacity, mental efficiency,
intellectual and cognitive development and this index can
be used for infering about an individual's cognitive and
intellectual development.

Comparision Between Govt.Servent
And Convent School Students:

The two groups were compared on the two criterion
variables by using the t-Test. The results are summarised
in Table 3.

TABLE 3

Comparison Between Government and Convent High
School Students on Intelligence & Reaction Time

Groups	Reaction Time					Intelligence				
	N	M	SD	t	df	N	M	SD	t	df
Govt.High School Students	50	38.26	7.78	3.74**98		50	36.9	5.71	7.71**98	
Convent High School Students	50	32.43	7.20			50	48.1	8.55		

Note: **P $\angle$ .01

The results in the Table 3 show that the two groups
differ significantly on intelligence (t=7.71, df 98,
p $\angle$ .01), the intelligence scores of Convent School students
being higher (M=48.1) then the Government School students
(M=36.9). The groups also differ significantly on reaction
time scores (t=3.74, df=98, p $\angle$ .01), the reaction time of
the convent/school students being faster (M=32.43) than
their counterparts (M=38.26). All these results not only
confirms the fact that Socio-economic status contributes.
to the development of intellectual efficiency but also the

fact that intelligence and reaction time are related with
each other, the group better at one is also better on the
other, in this case the Convent school students.

Summary and Conclusions

The results of the study reveals that the Convent
school students are better on both reaction time and
intelligence than the Government school students, and that
there exists a definite relationship between the two
criterion variables. From the results it can be concluded
that the reaction time is a very good and useful index for
assessing an individual's intellectual or cognitive
development. Further the adverse social, economical
and emotional environment or conditions exert a great
amount of influence on the development of intellectual
capacities. These conditions may retards an individual's
cognitive or intellectual development and may slow down
the reaction time to various kinds of stimuli faced by him
in his day to day life. For the efficient and quick response
to a particular task or problem his inner processes should
be clear, not continuated by adverse conditions which may
make it more complicated and complex. The complexity of the
inner processes may result in the retardation of intellectual
development and hinderance to complete or to do a task,

6.13

hence prolonging the reaction time. All these realizations
on the part of a educationist, researcher, psychologist or a
guidance counsellor may help him in understanding certain
characteristics of his client's or student's intellectual
or cognitive development.

. . . .

6.14.

_R_E_F_E_R_E_N_C_E_S_

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Relationship of Locus of Control to State- Trait Anxiety and Self Esteem Among Nineth Grade Children

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A B S T R A C T

Present study was conducted on a sample of 220 IX grade students(110 boys and 110 girls) from Balasone District (Orissa) in order to identify rela+... ...locus of control, State An... ...ait Anxiety and Self- Esteem. Rotter's Locus of control scale, Spielbergerets State trait Anxiety Inventory and Thomas and Raj, Self Esteem Inventory were used for this purpose. Results shows the internally controlled boys and girls are having more selfesteem than enternally controlled boys and girls. The correletion between locus of control, self esteem and State-trait Anxiety shows that when locus of control score decreased the self esteem score increases and as well as State-trait Anxiety score decreases.

INTRODUCTION

Our society is multi-cultural, multi-social multi-religious one. The cultural pattern and social pattern influence the formation of life from neontal stage to old age. The present study deals with the personality variable such as locus of control, self-esteem and state-trait anxiety. People also differ in the degrees to which they believe that they have self control and feel personality
for what happens to them.

Operational Definition of the terms used:-

Locus of control:- Rotten defined locus of control as an expectancy variable that describes the perception of personal control that one has over the reinforcement that follows his behaviour. This control is of two types:

a) **INTERNAL**

An internal person perceives that he has control over his fate and achievement and that effort and reward will be correlated operationally a person checking the material statemen of Rotter's Internal-External scale and getting a low score on the scale will be treated as internal.

b) **EXTERNAL:**

An external person perceives that powerful other's are the 'system' determine how will he can do, that rewards are distributed by such powerful other in a random fashion. Operationally a person checking the external statements of the I.E. scale and getting a high score on the scale will be termed as External.

B. <u>STATE TRAIT ANXIETY</u>

State Anxiety (A State) may be conceptualized as a transitory emotional state on condition of the human organism, that varies in intensify and fluctuations over time this condition is characterized by subjective, consciously perceived feelings of tension and apprehension and activation of the outnomic nervous system.

Trait anxiety(A-Trait) refers to relatively stable individual differences in anxiety proneness, that is to differences in the disposition to percieve a wide range of stimulus situations as dangerous on threatening and in the tendency to respond to such threats with a- state reactions.

<u>SELF STREAM</u>

Scholars usually draw a distiction between self-concept and self-estreem, self-concept involves an objective an objective on cognitive appraisal of the self, reflecting self-confidence coopensmith says"Self-esterm is the evaluation by which the individual makes and customarily maintains with regard to himself, it expresses an attitude of approval on disapproval....... It is a subjective experience which the individual conveys to others by verbal reports and other event expressive behaviour" It is an individuals' perception of his personal worth.

<u>OBJECTIVE OF THE STUDY</u>

(i)To investigate into the relationship among locus of control, state anxiety, Trait anxiety and self-esteem.

ii) To find out sex differences in locus of control, state anxiety, Trait anxiety and self-esteem.

(iii) To find out differences in state anxiety, trait anxiety, and self-esteem between internal and external boys and between internal and external girls.

HYPOTHESES OF THE STUDY

(i) There exists significant relationship among locus of control, State anxiety, Trait anxiety and self- esteem.

(ii) There exists significant sex difference in locus of control, State anxiety, Trait anxiety and self-esteem.

(iii) Significant difference exists between external and internal boys and external and internal girls in state anxiety, Trait anxiety and self-esteem.

DESIGN OF THE STUDY

Sample:

a) The investigation has taken the sample of 220 students (110 boys and 110 girls) of IX grade students of Balasone district (Orissa). The investigation used the random sampling method on subjects for the present study.

TOOLS USED

i) Lous of control scale(1966) by Rotter's I.E.

ii) State-Trait anxiety Inventory by spielberger, C.D. Rorsuch, R.L. and Lushene, R.E.(1970)

iii) Self-esteem Inventory by Immanuel Thomas and Dr. H. Sam San and Raj.

ANALYSIS OF DATA

Looking all the objectives, the investigators applied

7.5

Product Movement Correlation and 'test in order to
know the significant correlation and significant sex difference
among locus of control, State-Trait anxiety and self-esteem.
Like manner 'T' test was applied to know the significant
difference between internal boys and girls and external boys
and girls State-trait anxiety and self-esteem.

Table I Correlation of Boys & Girls

	1	2	3	4
1		-16*	-14NS	-10NS
2			-28**	-43**
3				-58*
4				

Table II Correlation of Boys

	1	2	3	4
1		.02NS	-.09NS	-01NS
2			-1.00**	-31**
3				0.45**
4				

Table -3 Correlation of Girls

	1	2	-3	4
1		-.28**	-09NS	-21*
2			-.46**	-56**
3				- 0.1NS
4				

**   Significant at 0.1 level
 *   Significant at .05 level

.7.6

N.S. Not significant

I Locus of control

2. Self-esteem

3. State Anxiety

4. Trait anxiety

Table –4 Sex Difference in Boys+ Girls

Sr.No.	N	Mean	S.D.	SED	(t) value
1. Boys locus of control	110	10.82	3.06	0.46	–17NS
Girls locus of control	110	10.74	3.63		
2. Boys self-esteem	110	79.41	9.55	1.34	1.28NS
Girls self-steem	110	81.12.	10.30		
3. Boys State Anxiety	110	35.95	3.6	0.5	1.97*
Girls State Anxiety	110	33.97	3.72		
4. Boys Trait Anxiety	110	37.22	4.56	.57	.25NS
Girls Trait Anxiety	110	37.08	3.99		

Table –5 Difference in Internal and External
Boys & Girls

S.No.	N	Mean	S.D.	SED	(T) Value
1. Internal State Anxiety(Boys & Girls	124	34.627	3.686	4.97	.696NS
External State Anxiety(Boys &Girls)	96	34.281	3.625		
2. Internal Trait-Anxiety (Boys & Girls)	124	37.194	4.289	.581	.119NS
3. Internal Self-esteem (Boys & Girls)	124	82.806	15.11	1.83	2.86**
External Self esteem (Boys & Girls	96	77.573	12.069		

** Significant at .01 level
* Significant at .05 level
NS Not significant.

FINDINGS:

1) There is negative significant correlations between locus of control and self-esteem for girls as well as overall boys and girls but there is very low insignificant positive correlation for boys.

2. There is positive significant correlation between locus of control and state anxiety for overall boys and girls but positive insignificant correlation for girls. Again there is negative insignificant correlation for boys.

3. There is positive significant correlation between locus of control and trait anxiety for girls as well as overall boys and girls but negative insignificant correlation for boys.

4. There is negative significant correlation between self-esteem and State anxiety for overall boys and girls as well as boys and girls.

5. There is negative significant correlation between self-esteem and state anxiety for overall boys and girls but positive significant correlation for boys and girls.

6. There is positive significant correlation between state anxiety and trait anxiety for overall boys & Girls as well as for boys but there is very low insignificant correlation for girls.

7. There is insignificant sex difference in locus of control scores.

8. There is significant sex difference in State anxiety scores.

9. There is no significant sex difference in trait anxiety score

10. There is no significant diffrence between internal
boys and girls and external boys and girls state anxiety and
same also in case of internal boys and girls and external
boys and girls trait anxiety.

11. There is significant difference bttween internal
boys and girls and external boys and girls in self-esteem
scores.

DISCUSSION AND EDUCATIONAL IMPLICATIONS

It is found from the present investigation that locus
of control has significant negative relationship with self-e
esteem in case of total sample, the same relationship is four
found in girls though incase of boys is is positive but
insignificant. When one becomes external, his/her self-
esteem decreases and the latter increases with every
increase in internality. To increase self-esteem in
students, the parents and the teachers have to create
confidence and belief in the students in their own ability
being the cause of their behavious.

In case of total sample and in girls, locus of control
is positively related with state anxiety. When one tends
towards externality state anxiety increases, and internality
lessens the intensity of A- State though mild A state is
favourable to a well balanced and well-adjusted personality.
However an excess of it may impair balanced personality
development students are to be made to have their perception
of personal on their own ability so that it can avoid a
severe A- State, Similar is the case with a Trait that

demands an immediate school programme for increasing
student's belief in their own ability to produce any kind
of behaviour.

Self esteem is found to have negative relationship with
A State in case of both boys and girls. When state anxiety
increases, self-esteem decreases and vice-versa. Such school
and family programmes are necess:tated in which an attempt
is to be made to decrease state-anxiety in students so that
their self-esteem would increase that would further affect the
other aspects of personality to result in well-adjusted
persons. Similar is the case with trait anxiety in the whole
sample. Obviously, state anxiety and trait anxiety are found
to have high significant positive correlation that support
many earlier study and that of the authors of the state-
trait anxiety Inventory.

The hypothesis of significant relationship among the four
variables are accepted for all pains of correlations except
between locus of control and trait anxiety which is not confir-
med in the present study.

So far as sex difference in all four variables are concerned,
boys and girls significantly differed in state-anxiety and
boys were found to possess more state-anxiety than girls. So
special care is to be taken by parents, neighbours and school
teachers to lessen state anxiety in boys, Regarding locus to
control difference in the four-variables, only internal

and external students differed in self-esteem and the
former are found to possess higher self-esteem than the
latter that demands special care to develop internal
perception of personals control in the adolescents on the
basis of the results, the hypothesis of significant locus of
difference is accepted for self-esteem and is rejected
for state anxiety and trait anxiety.

EDUCATION

A MODEL FOR ESTIMATING PUPIL ENROLMENT

AND TEACHER DEMAND

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A B S T R A C T

This paper presents a theoretical model
for estimating pupil enrolment and teacher demand
at a particular point of time. Pupil enrolment in
a specific class at a particular point of time has
been calculated on the basis of total births, survival
unto the school going age, school going population
success in the class, drop out and rejoining/latejoining
of the school. Teacher demand has been estimated on
the basis of enrolment, ideal teacher pupil ratio,
and attrition rate.

Educational institutions and institutions for professional training are the biggest industries in which human resources are shaped for diversified use in the job market. In industries, the quality of the outputs depends not only on inputs and processes involved but also on sufficient number of specialists dealing with the system. Therefore imbalance between demand and supply of specialist's effects to the efficiency of the whole system. The failure of the system may result complete anarchy. It is, therefore, necessary to plan carefully for each and every step in advance.

In the formal education system children are inputs in the hands of teachers - the specialists, who shape them for future life by inculcating certain values, beliefs, ideas and ideologies. Therefore, for smooth functioning of school system sufficient number of teachers are required. Various types of reasoning have been used to estimate manpower requirements such as: demand supply reasoning, trend analysis, extrapolation, regression analysis etc..

Various models have been suggested for estimating teacher manpower requirements. Unesco (1966) has developed an extensive model - "Asian model for Educational Development" in order to predict not only teacher demand, but pupil

enrolment, teacher stock, dropouts, stagnation work load on teachers etc. Richards (1972) has predicted teacher demand in the Alberta City using social demand model. Khan (1972) has discussed timbergan models for estimating demand of skilled manpower in teaching profession. Sinha, Sharma and Singh (1972) have developed an econometric model for estimating teacher requirement. Das, et al (1982) have developed a model for forecasting teacher manpower requirement of a state.

Besides these, models based on demand supply reasoning are widely used in for forecasting requirements of teachers at a particular point of time.

Certain terms such as demand, supply, surplus etc. are frequently being used in the literature, need a bit discussion here. The National Education Association (1979) defines the supply of teachers in any given year as the sum of two pools of individuals. One pool is composed of beginning teachers. These individuals are discribed as those who meet certification requirements and who are entering active employment as full time teachers for the first time. The other pool is composed of reintering teachers, certified teachers who are returning to active employment as full time teachers after not being so employed during the preceeding years.

<div align="right">contd.</div>

Research on teacher supply and demand typically defines demand as the available number of teaching position

The working definition of teacher surplus found in the literature is a simple one. Teacher surplus is simply the number of qualified teachers seeing teaching positions minus the qualified teachers seeking teaching positions available.

The reasoning used in the development of this model for estimation of pupil enrolment and teacher demand is based on the factors identified by a number of researchers. These are broadly three in number viz.

1. Enrolment.

2. Teacher pupil ratio.

3. Attrition rate.

ENROLMENT:

If N_i be considered as the total births in a particular point of time, $n_{i+\alpha}$ or n_p as the number of children survived upto the school going age ' ' (which is about 5 years in Indian setting), 'a' and 'b' be designated as school goers and school not goers than,

$$n_{i+\alpha} = n^a_{i+\alpha} + n^b_{i+\alpha} \quad\quad ——①$$

Provisions should be required to attract $n^b_{i+\alpha}$ population to the schools in the year ($i+\alpha$) to

achieve hundred percent population in schools in the year ($i+\alpha$).

Enrolment in Class I in the year ($i+\alpha$) can be given by the following formula.

$$I_{i+\alpha} = n^a_{i+\alpha} + n^e_{i+\alpha-1} + n^h_{i+\alpha} - n^g_{i+\alpha} \quad -②$$

Where

a   *   School goers

b   =   school not goers.

c   =   passed the examination/class/grade in which studying and joined next class

d   =   passed the examination/Class/Grade in which studying but did not joined any class.

e   =   failed in the examination/class/grade in which studying and joined the original class.

f   =   left the school/class/grade due to failure in the examination/class/grade in which studying

g   =   left the school due to other reasons during the year.

h.   =   joined the school/class/grade at higher age in lower grades.

Enrolments in class I in the year ($i+\alpha-1$) and in class II in the year ($i+\alpha$) can be calculated using the above notations for the total birth in the

year ($i - \alpha - 1$)

Similarly enrolment in various classes in the year $i + \alpha$ can be calculated considering total births in the years

($i + \alpha - 1$), ($i - \alpha - 2$), ($i - \alpha - 3$).........., and the above notations.

Total enrolment in any school can be obtained by summing up the enrolments in classes I, II, III..... in the year ($i + \alpha$)

TEACHER PUPIL RATIO:

Proportion of teacher to pupils at any given point of time gives teacher pupil ratio. Best estimate of teacher demand can be once arbitary value of teacher pupil ratio such as 1:20 or 1:15.

ATTRITION RATE:

This value can be obtained by calculating the proportion of teachers who left the job due to one or the other reasons to the total number of teachers in that year. For estimating attrition rate only those reasons should be considered which cause permanent vacancy. Such reasons may be dealt, retirement, termination of services, taking up non-teaching jobs etc. Provision should be made for short term vacancies also for effective planning.

Estimation of enrolment and teacher demand.

Using the above equations enrolment can be calculated directly, teacher demand can be obtained by enrolment and teacher pupil ratio and teacher attrition.

Discussion:

In this estimation model though survival rate, base years population is required these can be estimated using extrapolation or tredd analysis. It is expected that this will not deviate much from the actual values.

8.8

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A COMPARATIVE STUDY OF TRIBAL LEARNERS OF PROJECT
AND NON PROJECT SCHOOLS WITH REFERENCE TO IMPACT
OF NEED AND RELEVANCE BASED CURRICULUM ON ENROLMENT,
RETENSION AND ATTAINMENT OF LANGUAGE COMPETENCIES

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ABSTRACT

Present study was aimed at to compare enrolment and
dropout rate of tribal learners in the project and non-project
schools with reference to the impact of need and relevance based
curriculum and attainment of language competencies. Data were
collected from five project and five non-project schools
(Sample size-32) in Ganjam district using three questionnaires.
These were: (1) pertaining to information regarding enrolment
and dropout (2) socio-cultural survey questionnaire
(3) Language competency test. Results show that significant
difference exists in the magnitude of enrolment, retension
percentage, dropout rate, school environment language competence
etc. between the project and non-project schools in a tribal
area of Ganjam District.

Education today is under attack. What will happen to education is anybody's guess, but there are definite trends suggesting eventual decline of public education. Rising costs, together with declining public concern for education as knowledge becomes a less scarce commodity may lead to paring down schooling to training is basic schools. The present system of education basically culminated a great discontent among the human beings only because education suffers from the gap between the content and living experiences of its pupils, between the sytems of values it preaches and the goals set-up by the society, between its ancient curricula and the modernity of science. To remove such maladies and discontent among millions in the global context, education must be linked to life, must be associated with concrete goals, must establish a close relationship between society and the economy. The neglect or distain from which some elements of the educational programmes continue to suffer, the deficiencies and turbalance of curricula appear to us to be the among the most serieus symptoms of disease of which education is both the victim and the cuases.

The obsolescence and irrelevance of educational content and methods are only due to the imbalances can be defined largely in quantitative terms - too much of one thing relative to another (e.g. too much educational demand vis-a-vis jobs available). A frustrated educational reformer once equipped that it is harder to move a curriculum than a graveyard. This may or may not be an exaggeration. but in all events it is

clearly the case that during the past ten to twenty years, in the vast majority of schools the content of the curriculum and the method for conveying it to learners has lagged woefully behind the rapidly advancing frontiers of knowledge and the changing nature of real educational needs. The result is that much of what now being taught is obsolete in term of what today's student will require to live effectively in the last part of the 20th century and well into the 21st. Moreover, in many situations, what is being taught is irrelevant as well, viewed in the cultural, social and economic context of the particular nations and students concerned. With all the diversity, the most severe handicap of the new nations as they emerged from colonial rule was the ignorance of the masses of their populations. To a varying degree all colonial powers had made some significant to education in their dependencies.

Democracy represents the culmination of those striving for human dignity and opportunity for individual personal development which go back to the very beginning of civilization.

In a democratic country like India where there is equality of opportunity for all the get education, and when the rest of the world nations are marching towards a 'Learning Society', we cannot neglect the education of the masses. From ideological point of view, education should centre around masses not the classes. In Indian context

we cannot ignore the tribal people and tribal communities as
these constitutes a vast majority of the total population of
our country. It has been observed by a member of investigations
that the traditional curriculum retards progress and hinders
development. Our curriculum basically suffers from the gap
between the content and the living experineces of its pupils.
It is now universally admitted that education must be related
to life, needs and aspiration of the people. For achieving
this aim, the school curriculum should be flexible and
developed in a decentralised manner keeping in view the local
needs and resources. Equalisation of educational opportunities
and universalization of elementary education are other demands
of our national system. In this context great concern is
being expressed regarding the education of the tribal children,
who have to face innumerable educational problem. In spite of
the vast socio-economic and cultural disparity between the
tribal and non-tribal students, the tribal are exposed to
the same programme which is meant for the non-tribal or the
common people. The investigator selected a problem which aims
at assessing the effectiveness of the need and relevance based
curriculum adopted by the project schools and comparing the
outcomes of the same with the outcomes of non-project school,
The curriculum which has been developed by the United Nations'
Children Emergency Fund(UNICEF) and has been implemented in
the Project schools via SCERT, Bhubaneswar in collaboration
with the NCERT, New Delhi. The projects has been launched in

Orissa as a part of national venture with the objective of presenting a flexible, need oriented and more meaningful curriculum. The investigator intended to see the impact of the new curricula as envisaged by the UNICEF on the enrolment, retention and attainment of language competencies among the tribal learners. Here the investigator intended to compare the project schools with that of a non-project traditional schools. Since language is supposed to be a great barrier in imparting education to the tribal learner, therefore, language competency was taken as an important variable in the study.

STATEMENT OF THE STUDY

" A COMPARATIVE STUDY OF TRIBAL LEARNERS OF PROJECT AND NON PROJECT SCHOOLS WITH REFERENCE TO IMPACT OF NEED AND RELEVANCE BASED CURRICULUM ON ENROLMENT, RETENTION AND ATTAIN-MENT OF LANGUAGE COMPETENCIES".

OBJECTIVES OF THE STUDY

1. To compare the enrolement of the tribal learners in the project school with that of enrolment in the non-project schools.

2. To compare the rate of dropouts of tribal learners in both project and non-project school.

3. To develop a classroom test to ascertain the language competencies in the light of minimum learning continuum (MLC),

4.   To assess the language competencies attained by the
        tribal learners of both project (UNICEF assisted)
        and non-project schools and to compare both the scores

5.   To find the relationship between the enrolment and
        retention with different sub-items of the school
        environmental conditions (teachers' co-operation,
        parents interest and class size).

HYPOTHESES

1.   There will be significant differences in the enrolment
        figure of the project schools and enrolment figure of
        non-project schools .

2.   There will be significant differences on the retention
        percentage of tribal learners of project schools with
        that of the non-project school tribal learners.

3.   There will be differences in the school environment
        of the project school and the non-project school.

4.   The need and relevance based curriculum as envisaged
        by the UNICEF will have positive impact in increasing
        the retention figures of the tribal learners in the
        project schools in comparison to the retention in non-
        project schools.

5.   There will be significant differences among the tribal
        project school learners with that of the tribal non-
        project school, where there is no such implementation
        of the curriculum.

PLAN AND PROCEDURE

In the present study 'survey method' was adopted for probing the problem. In case of attainment of language competencies the design of state group comparison method was followed, as it follows no pre-test, no experimental effect and only one post-test.

Three Questionnaires were developed by the investigator. First one was designed to get the information regarding the enrolment and dropout rate of tribal learners. Data was collected through this questionnaire from the school authorities. The second Questionnaire is related to the socio-cultural survey of the learners of both the project and non-project schools. It was meant for obtaining some necessary information regarding the family, economic condition, parental education, school environment, learners' interest in education, teachers' opinion etc. These data were gathered from each student by the investigator in collaboration with the teachers, parents/guardians concerned. Thirdly, one language test was given to the learners of both the project and non-project school. The language competency test was constructed by the investigator in collaboration with SCERT.

The investigator collected data from five project and five non-project school situated in Ganjam district, which is a part of the tribal belt of south Orissa. The socio-cultural survey was conducted on 32 subjects each from the project and non-project schools.

STATISTICAL TECHNIQUES APPLIED

For the purpose of interpretation and analysis of the obtained informations/data, the investigator has used certain statistical techniques. Firstly for finding out significant differences between the retention percentage of project and non-project school, the investigator has calculated the standard error of differences between two uncorrelated percentages (SE_{p1-p2}). Secondly for finding out whether there exists any difference among the project and non-project school learners, family environment, school conditions, parental education etc. the investigator has applied X^2 (chi-square) test of independence. Lastly, in order to findout the differences between the scores obtained by two groups on the language competency test, the investigator has applied the t-test and has found out the Mean, SD of Project and non-project school learners language competency scores.

SAMPLE

The present study is confined to five UNICEF assisted project schools and five non-project traditional schools of the Ganjam district, located in the tribal belt of Southern Orissa. Socio-cultural survey was conducted by Questionnaires and the attainment of language competency test were administered on 32 subjects each from the project and non-project schools. Random method of sampling was followed while

selecting thirty two learners each from Project and Non-project schools.

MAJOR FINDINGS

The following are some of the major findings –

1. The investigation shows that there exists a difference in the magnitude of enrolment of the students of Project and non-project schools. It implies that enrolment figures swell in case of Project schools and thins out in case of non-project school.

2. Significant difference exists in the retention percentage of project and non-project school. It has been found by the investigator that there is a high rate of retention in project school learners in comparison with the non-project school learners. In other words it can be concluded that there is a lower rate of retention in the non-project school.

3. It has been found that the dropout rate in the project schools is less, whereas it is more in case of the non-project schools. In other words it can be concluded the occurrence of dropout phenomenon is more frequent in case of the non-project schools and has less frequent in case of project schools.

4. It has been found by the investigator that there exist a difference in the school environment of project and non-project schools.

5. It has been found from the present study that there exists a difference among the learners of project school in

relation to the non-project school learners with reference to the attainment of language competency. The language competencies of the project school learners are far superior than those of the non-project school learners.

6.   Present investigation reveals that the parental education of project school learners is slightly better than the parental education of non-project school learners.

7.   It has also been found that there is no significant difference among the project school and non-project school learners in relation to the parental occupation.

8.   It has been also observed that there is no line of demarcation between the project and non-project school tribal learners in relation to the parental income.

9.   Study has revealed that there is no difference among the tribal learners of project and non-project schools in relation to the family environment.

10.   It has been studied by the investigator that there exists a difference among the project school and non-project school learners in relation to the first generation and second generation educational levels. Most of the learners of the project school are the second-generation learners and very few are the first generation-learners and the reverse being true in case of non-project school learners.

11.   Investigation has revealed that there is a significant difference among the project school learners and non-project

the learners to their parents. Non-project school learners spend more time in their domestic chores as compared to their counterparts.

SUGGESTIONS

1. The Government both in the Centre and the Provincial level should take initiation for promoting the tribal education.

2. State government should carry out different projects in collaboration with some international organization and should carry out the recommendations as suggested by the UNICEF/UNESCO etc.

3. Efforts should be made by the State governments for the upliftment of the poor tribals, there should be some incentive, by the governmental organisations to encourage education among the tribal folk.

4. The sincereity of the Governor, Educators and people concerned is to be tested for the improvement of socio-economic conditions so that the tribal can join the main stream of the national life and play an effective role in bringing a change to their own life and destiny and to the life of the people of the State in general.

5. Some kind or preparatory course(a full course of pre-primary education) should be provided to overcome the linguistic problem and the concept promotion problem caused due to narrow social and cultural environment.

11.1.

EDUCATION: A MEDIA OF
TRANSMITTING VALUES
****

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A B S T R A C T

This paper presents a theoretical basis for

inculcating higher values among children through the media

of education. It puts forth the unevitable role of Education

in shoping ideas and ideologes of generations, cultures and

societies. Discussion on the vitality of modern education

system in providing appropriate value system and its

influence on copying with the rapid advancement in present

day society have also been done in brief.

11.2.

EDUCATION, A MEDIA OF TRANSMITTING VALUES

Education is a term that had been subject of great
discussion among philosophers, pedagogsts political
thinkers, psychologists and sociologists. Each one of them
has emphasised their respective interest in the definition
of education. Some have defined education as preparation
of life, while others looked out it as a process influencing
mental growth. Still others attempted to define education
as a learning process. All these definitions have limited
the concept of Education.

There seem to be one commen element in all these
approaches to define education, viz, "an initiation into the
pattern of ideas which is valued by a particular society and
is handed down within it from generation to generation".
(Sten-house, 1971). These thinkers viewed education as a
process which imprints values, standards and norms on the
mind of an infant who enters the world without knowledge of
any sort. During this process of transmitting knowledge the
child takes advantage of the knowledge which his ancestors
have already won by keep thought, hard experience and bitter
mistakes. Each generation makes its own contribution to
this tradition and in turn hands on to its own children a

richer heritage; and in a sense each new comer enters

through education into the collective mind of mankind.

Social Scientists <u>looked at education as the media</u> <u>of the transmission</u> of culture. By culture they meant the ideas shard by a social group whether it be a tribe, a complete nation or a whole civilization. These ideas are preserved, remembered from generation to generation. In this way education serves both society and the individual. It serves society because it keeps its culture alive. It seems the individual because it places that culture at his disposal, so that he may use it to fulfil his needs. Thus society and individual function in complementary positions to each other. Society needs individuals whose abilities and personalities are developed by education, while the individual needs his society's culture in order to develop himself.

Persons has defined three fundamental characteristics of culture as follows: "First, that culture is transmitted, it constitutes a heritage or a social tradition: Secondly, that it is learned, it is not a manifestation ...... of man's genetic constitution and third, that it is shared". Sten-house believes that person is emphasising that culture, though in one sense a heritage, is one which can only be entered by those who will make the effort to learn, and that this effort will yield them, not some knowledge uniquely possessed by themselves but rather a body of ideas

accepted as the basis of life by their whole society.

Therefore, it is in the sharing of culture that man becomes a fully social, rather than a solitary animal, and the great creative achievements of individual persons can be seen to grow from cultural tradition and are by no means entirely unique.

Thus the life of any society depends upon its culture. To be within a culture is to be able to communicate and cooperate with one's fellowmen, to think within the richness of an intellectual tradition and to take one's place in the economic and social life of society. Human progress depends upon the maintenance of culture.

Defining Values:

Sociologists and anthropologists have given various definition of culture. It is broadly conceived as that part of the society which is non-physical, non-genetic and is more or less permanent. Culture is all man made things in the society. It is also identified as material and non-materials, the non-materials aspect of culture are the ideas, the notions and the values. The concept of values bounded with the notions of good or bad and positive or negative. These are the constations of the concept values which characterize the ethical force of this concept. It is also considered as

a force which satisfies human desires. Urban (1956) defines
values as a characterisitcs of an object which satifies
human desire. Such objects are termed as 'good'. He further
defines value as anything that furthers or conserves life.
In this form "value is a vital phenomenona appearing in a
psychological form". Further analysis of this philosophical
construct helps in evolving a more comprehensive definition
of value. It is, "that above is ultimately and intrimsically
valuable that leads to the development of selves, or to
self realization.

According to another approach the concept values
refer to interests, likes, preference, duties, moral
obligations in addition to desires, wants and needs. It
further refers to aversions and attractions and many other
modalities of selecting orientations (Pepper, 1958). These
conceptions of values are either etheological or ethical in
character. The economic worth of an act or object is also
implied by the term value. Social scientists define values
in their broader perspective. For them values are "conception
of the desirable, influencing selective behaviour.........."
values regulate impulse satisfaction in accord with the whole
array of heirarchical enduring goals of the personality, the
requirements of both personality and socio_cultural system
for order, the need for respecting the interests of others
and the group as a whole in social living (Kluckhohan, 1951).

Value is further understood as anything of interest to a humans subject. It may be seem from the foregoing attempt' to define values that it is not an easy task to evolve a universally acceptable definition of value. Ottoway, suggests that value includes something of the religion, philosophy and ideology of the people. As it will be seem in the later part of this paper, it is deffi cult to diverce education from culture, an influential educational system provides a free interaction between technical inventions and socio cultural forces that guide or regulate the behaviour of the members of the society i.e.,values. An effective educational system must have clearly defined objectives. These objectives refer to a set of ideals for which knowledge and skill are imparted. The value considerations are so widely perrading the sphere of education that all educational d'etsions involve or presuppose value decisions. Thus there is a close connection between educational objectives and values. Town states that in the light of the nature of experience and of functional relation of values to experience as understood by the biological, psychological and social sciences, moral and spiritual values are indigenous to the relation and functions of the school (Education, itself).

The values are important in regulating and synchronizing the behaviour of an individual with his environment. School has a role to play in the formulation of these values.

Value orientations and social models are important factors in shaping the structure and organisation of the school. Dahlke emphasised the need of matching the values being taught in the schools with those of tranditional ones. When such a matching between old and the new values is missing then learning is replaced by indoctrination.

Values are of various types they are eternal and temporal, intrinsic and instrumental, lower and higher, individual and social etc. The other classification can be made is that values are bodily economic and recreational. Those connected with the social self are bodily, economic, recreational, as-sociational, character, intellectual, easthetic and religions. (Urban 1956). These values are divided into broader classifications, (a) organic and (b) hyperoreganic. Hyperorganic values are subdivided into two categories namely values of sociality and spiritual values.

The major process through which the culture is transmitted from one genration to another is the process of immitation. The Child learns about his culture from parents, siblings and peers through direct experience of their physical environment and of their place. The content of such an informal learning cannot be transmitted through

formal schooling. Since such learning is closely related
to their immediate needs, the children's ability to learn
and remember is sharpened and encouraged. It may be
construde from this that the values, which are the important
components of a culture are not transmitted through formal
education at all. In societies, other than primitive
ones, where education has become a more organised aspect
of life, young people not only learn basic skills but also
acquire certain social graces and an idea of right and
wrong according to their ethical code of their particular
society. Children in such a society enjoy not only what
may be called a vocational education but also, one which
equips them to make the most of the social life of their
groups.

According to stenhouse in advanced societies education
has to elements namely, the spread of literacy and controlled
direction. It is in the second element that the teaching
of values are incorporated in an educational system.

Ever since the Greeks propounded their view of
education, the function of education of transmitting values
from one generation to another had been given a central
importance in the educational system. It was the question of
transmitting what types of values through education that
was the main cause of socrates martyrdum.

There had been a large number of instances where education had been used to indoctrinate the minds of the young people. The attitudes and values which supposedly strengthened the idiology of regimes were taught to children in the schools right from their early age. During such a process individuality of a child is crushed. On the other hand there are equally a large number of instances where education has been used as a media of evolving new values, ideologies and bringing about a cultural revolution in society. Still another view put forth by Plato holds an important place in the theory of education till today; that education should go beyond the mere transmission of ideas from one generation to the next and that by controlling the up bringing of young one could aspire to make possible truly sichar and fuller life. Thus plato saw education as a creative force with which to shape a better society. F. laid emphasis on the virtues of wisdom, courage, temperance and justice. Perhaps for him these were the basic values that from a just society, a state and an administration following this approach were find that Plato characterised his educational system with a function to "Discovery those whose natural talents offered greatest promise" such people possess wisdom and virtues.

The above discussion rises a few basic questions like, should values be transmitted in the education, who should

deside what values to be transmitted and what not?; is it
possible to evolve and educational system which does not
transmit the values? our further discussion on the topic
will mainly be an attempt to present a few views on these
questions.

In order to answer our first question i.e., should
values be transmitted through education? We shall has to
examine the content and objectives of our educational
system as indicated above. The content of education is
decided upon on the basis of objectives we say for a
particular educational system. The true character of education
reveales that the transmission of values from one
question to another is automatic because of the first of the
two elements of education i.e. spread of literacy is
achieved with the help of books prescribed for the school
and college students. These serve as media of education and
social values, attitudes and believes are transmitted to
the children through the literature they are given to read.

The second question i.e. who should decide what values
be transmitted and what not is most crucial ones. It is in the
attempt to answer this question that educationists and
thinkers both in the primitive and advanced societies have
been trying to lay down the objectives of their respective
educational system. In a civilized and well knitted society

objectives of an educational system have been laid down at
different levels. The appex body in the society, devoted to the
cause of education, lays down the broad guidelines of the
educational system which are simply the extent and the
content of a culture to be transmitted from one generation
to another. It is at the lower levels that the details of these
extents and contents are worked out. These are brought before a
teacher in the form of a curricula and the methods of teaching
this curricula. Thus the real media of tranmitting values
are methods of teaching and the curricula. Though educationists
may feal that they are dealing with the methods of
developing craftsmanship in a citizen, yet be kind this
whole process, consciously or unconsciously they are working
to wards the development of his balanced personality. Values
being a component of personality can never be left of the
educational system.

When we look at the new trends in education which
emphasizes need based character of an educational system,
we are not diverging from the basic role of education i.e.,
transmission of culture and its values. It is because the values
themselves are a source of need and desires of an individuals
as well as of the society. Societal needs are a sort of a
universal consesus on what to be transmitted and what not
to be transmitted. In this context it would be in the fitness

of things if we study in depth the evolution of education
system in India. Broadly speaking, there are four stages
of this development, namely, education in vedic period,
education in medieval age, European impact on education
system and lastely post independence educational system.
A comparative study of these four stages of the development of
education in India would diverlage distinct emphasis on
values. The most gloomy state of education appeared during
the third stage of development of education in India, i.e.,
European in trusion into educational system. Macanley's
intrusion into Indian educatis erroded all the Indian Values
embiled in the educational system in such a gradual manner
that today we are facing a greatest conflict in the minds of
educationists as to what should be taught and what should
not be taught. The enriched Indian culture was divorced from
the new European educational system. This was an attempt by the
Europeans to start this gradual divorce process of the
culture heritage of the Indian people and attract them to
materialist values of the Europe.

Thus it must be construde from the above that the
introduction of European educational system was an implicit
attempt to bring about a cultural revolution in India.
Europeans succeeded in their attempt and altogether a new

outlook, new way of life, qualitatively different aspirations among the people and their motivations developed.

In order to achieve this aim through education the main technology adopted by them was to subordinate the Indian thought, literature, arts and science to the European ones in the curricula developed by them to be taught in schools and colleges in this country. The structure and functions of school and college during this period was significantly different from those existed in India in the form of Pathashalas, Madrasas, Gurukuls and Ashrams. These educational institutions, both of pre and post European impact are organized specifically on the basis of importance attached to the most set of human values. During the post Europeans impact are the major values on which these educational institutions were based were compassion, respect of elders, sacrifice for truth, devotion to the teacher and distribution of different stages of life to various causes for the self, for the family, for the nation or society. Unfortunately these values were taken out of the content of educational system introduced by the Europeans. Instead new set of values like obedience to political authority, attaching higher importance to material well being, paying the cost of sacrifice and devotion through monitary returns, indifference towards teachers and elders, and self conteredness took the place of older values.

11.14

During the last 25 years attempts are being made to revieve the Indian values in the content of education along with new emerging set of values. The new values that are developing are mainly based on the modern philosophy which is over loaded with materialism, nationalism and humanism. These values have not been fully embided in the present educational system. However much emphasis have been laid on incorporating these values in the edueational system laid down by Kothari Commission. It is suggested that the books may be written in such a way that the coming generation internalise them. The process of internationali_ sation of such values has to be acceralated by the teacher. The educational aids like television, radio, cinemas and the press provide non_formal support to such an internalisation.

Ancient India's scientific achievements are to be reinterpreted in the modern context so that the youngesters are provided with an educational environment to raise the national esteem and embide the nationalism in them. It is education through which the scientific temper can be developed among the younger generation.

During the last decade or so the question of re_writing and reinterppreting the history of nation has been debated much, but very little is done in this direction. Another

important function of education which has not been fulfilled
is that it has failed to develop feeling of national
integration among the people. Whatever the other causes
of this state of affairs may be, undoubtedly, one of the
important cause is the absence of well defined values to be
transmitted through education.

To conclude we may say that educational materials,
viz, books, journals and films etc. are the main sources
that help in transmission of values from one generation to
another.

11.16
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PROMOTING RESEARCHES IN INTEGRATED EDUCATION

FOR THE DISABLED

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Research is inevitable for develpment. Like other factors
it also deserve equal attention. It provides input for develop-
ment. The circumference of other areas like natural sciences,
physical sciences, psychology, education etc. multiplied because
of growth in researches, side by side other environmental factors
like economic provision, provison of materials, willingness and
facilities for implication. Considering other factors we must
enlarge the areas of research if we want development in any
field. The same is imperatively needed for special education
particularly in education of the disabled. Being installed in
the quarter of nineteenth century the progress is not up to the
mark. It is still in its embryonic stage. If research in
education of the disabled is in embryonic stage, research in
integrated education for the disabled is yet to be born. It
requires a nourishing environment and a true spirit to grow.
We researchers should shoulder this responsibility. This article
is directed to this end with retrospection which will provide
a guidelines for further improvement.

Retrospect:

As mentioned above the early researches in education of the
disabled are negligible. The three surveys of research in
education compiling educational researches in India from 1939
to 1982 do not have even a dozen of studies in education of the
disabled (Buch, 1974,1979,1984(inpress). The survey made by
Indian Council of Social Science Research from 1972 to 1976 on
researches in psychology also does not contain more (ICSSR,1981)
To explore the reality an attempt is being made by NCERT(Jangira
in progress) to collect studies related to education of the
disabled. Collected studies (50 in number) have been conducted
only in Masters Degree level expect 3 studies in Ph.D. level.

appropriate answer to this question the following are discussed.

Areas of Research

In the begining step it is necessary to identify the priority areas of research. It provides a guideline to researchers about 'Where to start' and 'What to do' . In that connection the foll - wing priority areas are suggested.

1. Conceptual Research.

Integration is a new concept in the Indian context. It will be worthwhile to conceptualise integration emerging from the convergent supportive theory from the relevant disciplines. The concept will have to be validated empirically. Its effectiveness is also to be studied through comparing education of the disabled in special setting and integrated setting. But in these types of studies treatment fidelity must be ensured. It will also be worth while to examine as to what type of persons with what type of disability are amenable to these two systems so far as education is concerned.

2. Disabled Child.

Lot of empirical research needs to be carried out on Indian disabled children to draw the change of profiles. The developmental norms developed by NCERT (Muralidharan,1976, Bevli, 1974) can be the starting point where in displacement and deficiencies can be identified. It will be worthwhile to build up profiles of the disabled child, their personal characteristics, cognitive, psychomotor and affective development. Their self-concept, perception, adujustment to others, attention and learning styles may also be studied.

3. Early Intervention and Home Management

These are the unavoidable ingredients of preschool integration. Early intervention programmes are oriented towards the early compensation for disability. If the impairment is identified early and intervention programme started, the disability will be reduced to the minimum on the basis of nature and degree of

impairments. To facilitate intervention programme in formative
years, early identification programme is necessary. Early
screening programmes are foundation stone of early identification
Though some tests for early screening like DDST,DIAL, ALP are
available in abroad, itis rare in India. Efforts should be maid
for developing screening test. In addition to it precedural
studies like reliability of formal detection, developing inf...
structure in formal detection using parents and village level
functionaries, reliability and validity of scales, checklist
guidelines can be conducted. It can be followed by the study
impact of early stimulation in home as well as preschool.. In
this study effectiveness of low cost aids available in the commu-
nity, matching of aids with the nature and degree of handicap.
procedure of stimulation programme, parent involvment can be
eexplored. In home management studies focuss on parent stress
and anxiety due to disabled children, their attitude, effect of
their socio ecenomic status,educational level on acceptance and
negligence towards the child, their aspiration about the child,
factors determining their interest in nurturing the child and
parent guidance and counselling will provide a least restrictive
   home environment   to the child.

4. Modalities of Integration

There are different modalities of integration. We have to
see what is the relative effectiveness in terms of education of
the child ? With what type of children with what type of level
and what type of disability in what social cultural media and in
what profile media the models are effective ? What is the level o
efficiency of the models when cost and pupil outcomes are taken
into consideration. Which type of planning for integration will
be helpful ? Area planning or institutional planning? It will
also be worth while to investigate the determines of the effecti-
voness of different models of integration. As interdisciplinary
coaction the problems lies on the concordance among members   of
various discipline in decision making can be investigated.

5. Adjustment of Classroom Instruction

Placement of disabled children in regular classroom requires adjustment of instruction to meet his needs. Definitely the adjustment is according to the level of disability of the child placed in the classroom. It will worthwhile to study the perception of regular teacher about the adjustment in the instruction, his competency in adapting instruction in the regular classroom, instructional need of the different group of disabled, organisational support needed, effect of different adjustment pattern and factors facilitating the adjustment of classroom instruction. On the other hand the effect of adjustment of instruction on nondisabled peers' perception and achievement should be explored.

6. Class room Interaction

Disabled students have different variety of experiences in comparison to non disabled students. They may be comparable with their peers on some aspect of experiences, but due to visible inpairment acceptance by their now peers in regular classroom is uncertain. The researches in this area can answer such questions as, which group of disabled children are more accepted on the basis of their nature and degree ? What is the effect of disabled students value system, teachers initiation on social modeling? What type of reinforcer are effective in contingences of reinforcement? How far Models from social interaction family developed by Woil & Joice (1980) are capable to facilitate interaction among them ? What way Aplied Behaviour Analysis are applicable to different group of disabled children ? Another set of questi like what is the sociometric status of the disabled child and th resource teacher? What is the level of rejection acceptance of a disabled child from the socio emotional climate in the instituti on and the rejection, acceptance patterns of the disabled in to the system.

7. Teaching;

The frame work of research on teaching can be adopted for research in this area as well. The research on teaching has been

conceptualised in to these components. The first component refers
to the presage variables which are related to the teachers- his
personal characterstics, academic attainments and professional
competencies acquired. These also include the formative experien-
ces that the teacher brings with him from out side the ambit of
formal academic persuit and professional training. The second
set of variables refers to the context variables. The context
variables include pupil characteristics (any group of disabled)
cognitive personal characteristics, psychomotor capabilities,
nature and degree of disability. The second set of variables refers
refers to the curriculum that is curriculum characteristics, kœi
keeping in view the cognitive and sensory defio.it arising out of
 the disability of the disabled. Yet another set of context
variables refers organisational climate or socio emotional climate
build upin the school. Arising from this climate is the product of
of human relations between the head of the institution and teachers
and between teachers and teachers. To this may be added the contri
bution of the human relations between teachers and students,
students and students and the disabled children. and normal student
who are to be placed in the regular schools. The presage and
context variables determine the process variables during transact-
ion in the class room. It affects teacher behaviour which of
 course affects the student behaviour. The teacher and student
behaviours during classroom transactions in the process of teaching
results in another set of variables known as pupil outcomes which
can be immediate outcomes and long term out comes also. The imme-
diate gains in achievement, attitudes and values are coveres under
this. Long term outcomes is in terms of a person's adujustment in
his subsequent life in the profession and at home as wellas in the
society. Research is to be carried out for teaching of these
children in the classroom in resp ct of each of these studies and
variables. To then we can also add some variables relating to
planning and management which will be required for taking decisio
ns in that particular area. These will relate to the service of
disabled identification of any group of disabled, assessment of
their degree of disability, impact of impairment on various

ability, the   preparation for placement, selection of the
schools and of course implementation of the programme.   In that
context the human relation willalso go beyond the institutions.
The broader frame work of the human relations will provide the
discrepancies in the   perception of the person involved in
the programme and the means to overcome the descrepancies.

8. Teacher Effectiveness:

The dearth of teacher man power in the fiels of IED is a
bottle neck.' Most of the employed teachers a re untrained.
Effectiveness of this programme is lalso depend on a competent
teacher.   Those untrained teacher can acquired the competencies
through inservices programmes. The researches in this area should
focus on the training strategy like   effect of microteaching
on the competencies of the resource teacher. If any other strtagy
         other than this   is effective for teacher training in
special education? What are the characteristics of resourse
teacher   responsible for expected role performance ? How far teachers
are ready to accept a new challenge? These questions can be
answerable more effectively by adopting tringular research
paradigm derived from Mitzel Model of Structure of Teacher
Effectiveness (Donolly 1981)

In addition to it the above mentioned priority areas some
survey on community resources, total number of institution and
no of disabled children enrolled, number of teacher training
institutes, no of school inplemented the IED scheme and category
and number of disabled children enrolled in regular school can
facilitate the implementation of IED scheme.

Methods and Type of T Research

The predominant research methodology in the special educa-
tion in general and integrated education in particular is
quantitative research. It emphasises searching for the fact
and causes of human behaviour through objective, observable and
quantifiable data. Instead of its wide use it has been critici-
zed for being primarily confirmatory or verification oriented,

particularistic and ill suited for addressing the social or
educational relevance of research efforts.(Le-Compt & Goetz,1982
and Smith,1983). To broadening the research perspective in
special education qualitative research has been proposed
(Stainback & Stainback, 1984). The same can be applied in
case of integrated education f r the disabled. It is based on
a theoretical position referred to as phenomenology. Phenomena-
logists seek to understand people's perceptions of events in
their environment. In order to gain an understanding of th
perceptions, qualitative researchers study a cvariety of docu-
ments, talk with people, and observo how they behave in relation
to events in their environment. They collect and analyze data
from a variety of sources to produce some logical ,or as
Campbell(1979) described it,'commonsence' perspective.

     As survey of researches in education and special
education shows scanty quantitative researches, no question
arise for qualitative one. If the researcher will start the
'will   ... qualitative research in the begining   which
'/help in developing theory in special education, that can be
subjected to verification through quantitative researches. Se
far as research design is concerned single-subject research
design is more appropriate for disabled students to study the
behavioural changes. If the group studies operated the
available design employed in our educational research may
transfer to special education as well as the integrated
education for the disabled.

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MODEL BASED TEACHING AS A STRATEGY FOR IMPROVING TEACHING EFFECTIVENESS

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ABSTRACT

This paper presents a brief and precise account of systematic efforts needed in Research in Teaching for developing Teaching theories. Teaching skills approach and teaching model approach are assumed to be more promising in developing teaching theories. The author is of opinion that four families of teaching models emerged as a result of systematic research can give some ground to develop teaching competence among prospective teachers.

The first and foremost aim of our education is to sharpen the higher mental processes of the pupils in order to help them in their better adjustments in the Changing World. Teacher plays a pivotal role in this educative process. Teaching enables the teacher to achieve above objectives. It is an activity on the part of one person intended to facilitate learning on the part of another. (Gage 1979). This activity can be conceived as the ternary relation i.e. x teaches y to z. Expressed in the notation of relation theory, this becomes $T(x,y,z)$. In this notation the domain of 'x' is the set of persons who act as teachers, the domain of 'y' is a set of knowledge, beliefs or skills selected by a teacher and the domain of 'z' is a set of individuals who are taught by a teacher. All these domains contained so many variables which are classified into 4 classes i.e. pressage; context; process and product. (Dunk-in and Biddle 1974). The components of product variables emerged from process or interaction of other variables provide an idea about effective teaching. Hence, the concept of effective teaching is derived from the positive interaction of $(x \times y \times z)$. Teacher effectiveness, which is an out come of effective teaching, imposes a number question like - who is an effective teacher? How teaching will be effective? What teaching strategy to be employed? etc. To provide suitable information incessant research efforts have been made on teacher effectiveness. But these early research efforts

became failure due to (a) failure to observe teaching
activities (b) theoretical impoverishment (c) use of inadequate
criteria of effectiveness and (d) lack of concern for
contextual effects. Further the trends of research emphasize
teaching on the assumption that it is more likely to produce
useful knowledge than research on teacher effectiveness. The
present researches on teaching focus on its processes which
will provide valid information for teacher effectiveness.
These processes of teaching have different approaches which
is revealed by a survey of teaching methodology over the years.
In the earlier phases of the developmental history of
teaching, gestalt view was prevalent that enshrined the
Teaching Method Approach. In due course some common character-
istics or behaviours were integrated in to groups called as
typology of teaching styles. Further with the development of
science and technology, accompanied by its impact on various
facets of human activities, Teaching Skills Approach emerged.
Too much of atomization in teaching skill approach resulted
in dissatisfaction among the educational practioners as well
as theorists who felt that the teacher has been conceived as
merely a machine at the expenses of his potentiality for
creative teaching. As a result, an intermediate alternative in
the form of Teaching Model Approach came into existence. It
will not be out of place to consider these approaches little
more in detail.

Teaching Method Approach:

Teaching method refers to the formal structure of
the sequence of acts commonly devoted to instruction. The
term involves both strategy and practices of teaching. It
covers the choice of what is to be taught at a given point
of time, the means by which it is to be taught, and the
order in which it is to be taught. Gage (1963) defines
teaching methods as 'recurring instructional process;
applicable to various subject matters, and usable by more
than one teacher. They are recurrent in that the activities
are repeated over intervals measured in minutes or weeks. They
are instructional process, such as patterned teacher behaviour
(as Lecturing, discussion, recitation).

The teaching method approach views the teaching
situation as a whole covering the educational objectives and
principles of teaching followed by evaluation. The effective-
ness of the teaching method approaches lies in its emphasis
upon the total view it provides to the teacher. A teaching
method realises educational objectives but at the same time
it may not focus on specific smaller units of instructional
objectives. The approach in this case is synthetic and not
analytic so far as teaching process is concerned.

It becomes very difficult to train teachers in
particular methods because of several reasons. The method is
a complex of a number of teaching skills and behaviours. The
teacher is required to master the method as a whole rather

than its components. This makes it difficult for teachers both pre-service and in-service to acquire proficiency in mastering the method.

Typology of Teaching Styles:

In teaching method we will find that the sequence of teacher behaviour are not random. It is ordered in tkhe direction of helping a student grasp the subject matter properly. These sequence of teacher behaviours have some common characteristics. The common characteristics are clustered into groups which are called teaching styles. These groupings are often denoted as 'types'. 'Types is defined as 'categories of persons such that every person in the category is more like every other person in the category than he is like any other person in any other category'. Maquitty (1967).

Teaching styles are less generalized than teaching methods. These are developed through empirical data f-rom both formal and informal teachers, the objectives of whom differ. So which teaching styles should be adopted by a particular teacher for effective teaching is questionable? It is supported by the findings of Wallen and Travers (1963). Their findings emphasize that changes in pupils remains largely unaffected by style of teaching. It also does not ascertain what factors influence teachers in their decision to adopt a particular style or approach. This poses a problem for the teachers to select appropriate teaching style for teaching.

Teaching Skill Approach:

Other area of studies with instructional process involving teacher and student behaviour during classroom transaction were studied in relation to student outcome. These studies analysed teaching interms of teacher behaviours. The process of analysing teacher behaviour was reinforced by promising findings in reviews during sixty's and seventy's (Gage 1963, Biddle 1974, Flander 1969, Rosenshine 1972). Some effective teacher behaviours were identified and it was considered that teaching should be analysed in terms of teacher behaviours, and that effective teacher behaviours should be developed through programme of preservice and inservice training. During the course of time interrelated teacher behaviours were organized into what has been described as teaching skills. Teaching skill can be defined as a set of interrelated teacher behaviours under the control of teacher for the purpose of realization of specific instructional objective(s) (Jangira, 1982). Besides teacher effectiveness research, this analytic approach to teaching also has its roots in programmed instruction and behaviour modification approaches. The teaching skills or competency identified common to subjects and grades are known as core teaching skills or general teaching competence. These include questioning, explaining, varying the stimulie, reinforcing etc.

The strong point about the skill approach to teaching is that it makes easier for the teacher to understand skills of teaching in concrete form. Secondly the training of teachers is facilitated, because a teacher instead of starting with practicising a teaching method as a whole, can acquire the teaching skills one by one, as in the case of microteaching (Jangira 1982). The weakness of this approach, as is being Voiced in the educational circle, is that it leads to too much of fragmentation of teaching. The teacher does not get an integrated view of teaching. Hence, they fail to synthesize the skill into the teaching styles of their own.

Teaching Model Approach:

The preceding sections have described the two extremes on the synthetic analytic continum of teaching. The methods approach is generalized, and teaching styles are less generalized so far as objectives are concerned while skill based approach is atomized in terms of teacher behaviour and goals to be realized. It has also been shown that all the approaches have strength and the weakness. On this continum another approach is located which is neither too generalized or too atomised. This approach is known as teaching model approach. A model of teaching comprises guidelines for designing educational activities and the environment. They are prescriptitive teaching strategies to realise specific instructional goals. Presoriptive in the sense that teacher's

responsibility during the planning, implementing and evaluating stages are already defined (Eggen; 1979). These models are directed towards the realization of specific goals. Over a period of time a number of models have emerged from researches on learning, instruction, counselling and developmental psychology. About forty models have been identified by Joice. These models have been classified into four families namely Information Processing Model, Social Interaction Model, Personal Model and Behaviour Modification Model (Weil & Joice 1978, 1980). A brief descriptions of the models are as follows.

Information Processing Family:

This family of models emphasises the information processing capability of the student. They are more relevant in the context of academic achievement which is the major responsibility of teachers in our schools. Information processing is defined 'as the ways in which people handle stimuli from the environment, organise data, sense problems, generate concepts and solution to problems, organise data, and employ verbal and non-verbal symbols' (Weil & Joyce, 1978). Models in this family are directed towards the dealing with cognitive skills. The representative models of this family are Concept Attainment Model, Advance Organizer Model, Inquiry Training Model etc.

Social Interaction Models:

These models emphasize the relationships of the individuals to society or other persons. They are more appropriate for the social development of pupil and enhance the adjustive process in the society which is also a responsibility of teachers in our schools. These models focus on the process by which reality is socially negotiated with respect of goals. The representative models of this family are Role Playing Model, Juris Prudential Model, Simulation Models etc.

Personal Models:

These models emphasize the development of self and the process by which individuals construct and organise their unique reality. They focus on emotional life of the individual and help the individual to develop a productive relationship with their environment. In school climate another varying role of the teacher is to nurture the emotional growth of the pupil which can be achieved through these models. The representative models of this family are Synectics Models, Non Directive Models etc.

Behaviour Modification Models:

These models develop efficient systems for sequencing learning tasks and shaping behaviour by manipulating reinforcement. They emphasise in changing the visible behaviour of the learner rather than underlying psychological structure and the unobservable behaviour. These models

function as a remedy for the mal-adjusted pupil in the school. Modification of their behaviour, which is also a responsibility of the teacher, is emphasised by these models. The representative models of this family are contigency Management Model, Stress Reduction Model, Desensitisation Model etc.

The families for classification of the teaching models have been based on the major areas of the objective that we purport to realise. The emphasis rests on areas such as personal growth, social development and national and world citizenship. These models operationalise the professional roles of the teacher for discharging these multiple responsibilities

Why Model Teaching Will be Effective ?

The responsibility of the teacher, as all of us know, is to help in learning through the systematically organised activity termed teaching. The learning can be categorized into three domains, namely cognitive, affective and psychomotor and so are the objectives of teaching. For realising the objectives of teaching the teacher uses a variety of teaching strategies. These teaching strategies should be specific objective oriented which is provided by teaching models. When the teacher adopt teaching strategy matching with his objective optimum effectiveness will be attained.

These models acquaint the teachers with some information like how to understand the model, what should be the teacher's behaviour, how the interaction between student and teacher will

be facilitated, and how the teacher can take the help of other sources to increase effectiveness in teaching. Besides this the teaching models are not bounded by the number of students in the classroom. They can be applied to individuals and groups simultaneously.

It is believed by many that the quality of teaching improves with the increasing mastery over a variety of models of teaching and also the ability to use them effectively (Weil and Joice 1980). But at the same time, one can argue that attainment of mastery over all models of teaching is a difficult task. If one model is mastered and applied effectively, it can not achieve other objectives. To achieve different objectives the teacher should master some models from each family.

Assessment of Model Based   Teaching Competencies:

For effectiveness of teaching based on models approach, the teacher requires specific competencies for example, they should have a clear perception of the teaching goals. They must have the competencies to identify and select models appropriate to their objectives. Further teachers should have the competencies to implement; to evaluate the effectiveness of this model(s), in terms of designated teaching goals. These competencies should be identified through researches and tools to assess these competencies should be developed.

14.1.

FACTORIAL STRUCTURE OF TEACHING BEHAVIOUR

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ABSTRACT

The Study has been conducted to study the factorial use
of teacher's classroom behaviour. A sample of 180 secondary
school teachers were randomly selected from 24 secondary scho
of Varanasi region. The tool 'Teaching Behaviour
Schedule consisting of 42 items on 42 teaching behaviours
administered on the subjects. Data thus obtained were factor
analysed useing principal component method of factor entraction
and orthogonal varimax solation. Results show that eight factors
viz- Skill of questioning, explaning, black board writing,
reinforcing, introducing the lesson, summarizing the lesson,
using teaching aids and illustrating with examples which
explained overall 78.70 percent of variance are the
constitutent of teaching behaviour of a teacher.

14.2.

The strength of any educational system largely depends upon the quality of teachers who sustain it. Obviously effective teachers are not born, they are trained. Some Indian educationists like Saiyaidain(1962), Kirpal(1968), Shrimali (1968) have repeatedly stressed the need that theacher education should be improved in order to provide good education to the younger generations. The teacher education programme attempts, or is presumed to attempt to meet the challange with few assumptions. In the first place it is presumed that there is an adequate concept of teaching. Secondly it is assumed that this concept of teaching can be operationalized in terms of teaching behaviours patters invariably related to the desired educational outcomes. Thirdly, it is assumed that there are certain training techniques available thorugh which requisite teaching behaviours patters can be developed in a prospective teachers to affect the desired educational outcomes. Lastly it is assumed that once the teaching behaviour patterns are developed in the teacher, they are sustained and carried over to his assigned teaching position in the profession.

The practical training is carried out at present under two nomenclature, i.e. practices teaching and internship in teaching. Microteaching is one of the most important recent innovations in teacher education programmes which aims to modify teacher's behaviours according to the specified objectives Microteaching is a specific teacher training technique

through which the teacher trainee practices are teaching skill at a time in a small class with the help of feedback to improve the skill. Teaching is practised in terms of definable, observable, measurable and controllable Teaching skills, is the most important point in Microteaching (Passi, 1976).

A Teaching skill is a small set of teacher behaviour which together achieve a specific teaching act. Based on the research on teacher effectiveness, analysis, emerging psychology of learning and instruction, several sets of teaching skills have been identified by different institutions and individed workers. Allen and Ryans(1969) have listed fourteen teaching skills at Standford University. Eigateen teaching skills have been listed at Forwest Laboratory, California by Borg etal(1970)(Passi(1976) has given a list of thirteen teaching skills. Based mostly on the list of teaching skills developed at stamford university and the Fores Laboratory and list of teaching skills developed at CASE(Lalit. 1975), Passi has conceptualized twentyone teaching skills, which are essential for general teaching competence. Turney(1977)

has listed seventeen teaching skills. Jangira, Singh
and Mattoo(1979) modified the work and arrived at twenty
teaching skills while working with theacers educators, students
teachers and inservice secondary teachers. A number of these
skills are common with different terminology and minor
differences in teaching behaviours comprising the skill.
The listing of teaching skills raises some issues. Which
one of the available lists is to be accepted and why? Are
these lists exhaustive? In this connection Buch(1974) has
suggested that serious concerted attempts are needed in research
on teaching skills. Das(1981) and Passi ctal(1981) have also
emphasized the need of identifying teaching competencies
for a particular subject at a particular level.

Factor analysis is a branch of statistical science which
especially provides mathematical models for the explanation of
psychological theories of human behaviour. Factor analysis may
identify the primary abilities that constitute the larger, genera
general teaching abilities and build a factorial model of
teaching. Teaching a human ability and an ability is a trait
which is defined by what an individual can do. In fact
teaching is consisted of a set of teaching skills and a teaching
skill consists of various interrelated teaching behaviours.
By applying factor analytic technique the factors/skills and
components of a particular skill may be analysed.

The **Present Approach** : The present study was conducted
to study the factional nature of teacher's classroom
behaviour exhibited for the purpose of the promotion of
students learning. It is attempted here to find out the
factors/skills and their component teaching behaviours.

The Sample:

A sample of one hundred and eighty secondary school
teachers were selected randomly from 24 secondary schools
of Varanasi Region. Out of 180 teachers the number of science
social sciences and language teachers were equal i.e. 60. The
number of male teachers was 90 equal to the number of female
teachers. The number of urban school teachers was equal to the
number of rural school teacher i.e.90

The Instrument:

For the qualitative measurement of teacher's classroom
behaviour a rating scale developed by the investigator
himself was used, named as 'Teaching Behaviour observation
Schedule. This observation schedule consists of 42 items.
in the form of teaching behaviours. For all the items a five
point rating scale is given on which each occurance of items
i.e. teaching behaviours were rated by putting tallies against
the relevant rating points. The point (1) indicates 'very low
point (2) 'Low', Point (3) Average, Point(4) High and Point
(5) very high effective teaching behaviours. The coefficient of
interobserver agreement and coefficient of stability were
0.906 and 0.825 respectively.

The content validity was established by giving it to the
experts of the field and it is satisfactory. Its
concurrent validity with Baroda General Teaching Competence
Scale is 0.935.

Results and Discussions.

The Intercorrelations among all the 42 teaching
behaviours(Process variables) were computed by the method
of Pearson- Product Moment correlation. The intercorrelat-
ions among all the variables of a study constitute the
basic data for factor analysis(Herman, 1960 p. 12). The
principal component analysis as reported by Cooley and
Lahones(1962)and Mulaik(1972) was employed for factor
anaysing the correlation matrix(42x42). Factors will more
than 2.5. percent of variance were estracted. The verimax
factor matrix was considered useful for the variables
underlying the factors because rotation according to
Harman (1967), transforms 'arbitrary' factor matrix into
the meaningful factor matrix. Thus the rotation was done
by the method proposed by Kaiser(1965) which specifies an
orthrogenal transformation. The highest value of the
factor loadings of the teaching behaviours(process variables)
were considered significant to attach them with the facots.

It was found that the teaching behaviour of secondary
teachers is composed of 8 factors. Accounting for
78.7 percent of total variance. The structure of the
extracted factors are presented below:

Varimax Factor:

This factor accounts for 41.4. percent of total
variance and is composed of .8 teaching behaviours. These
teaching behaviours with their respective factor leadings are:
using concise and specific questions(0.85 6 , using proper snd
and adequate pause while questioning(0.855), Putting questions
relevant to teaching points(0.850), putting prompting questions
(0.812), putting question for redirection(0.807), putting
divergent questions(0.769), using questions to increase
critical awareness(0.654) and putting convergent question
(0.60 39).

All the teaching behaviours of this factor are directly
related to the activity of classroom questioning and are
considered in the nomenclature. This factor may be named as the
skill of questioning'

Varimax Factor-2   This factor is chacterized by highest
leadings of seven teaching behaviours and shares 8.9 percent
of total variance. These teaching behaviours with their
respective factor leadings are: Using adquate explaninkng
links (0;815), using planned repetition(0.807),using
relevant statements for explanation(0.805) using deliberate
silence in explanation(0.784), presenting subject matter
clearly(0.785), clarifying pupils, ideas(0.769) and
encouraging pupil. Pupil interaction(0.640)

All the teaching behaviours of varimax factor-2
are related to the act of explanation of the subject matter
Therefore the second factor may easily be known as
skill of Explanining"

Varimax Factor-3: The varimax factor-3 account for 8.5
percent of total variance. The five teaching behaviours
composing this factor with their respective factor
leadings are: Presenting main points on the blackboard
(0.939), Using blackboared relavant to the lesson(0.934),
Black board writing visible to all students (0.933),
Blackboard writing clear and distinct(0.927) writing pupils
answers on the blackboared(0.911)

All these teaching behaviours have highest factor
leadings on the varimax factor-3 and help the teacher to write
on the black boared during classroom teaching discourse
therefore, the factor has been called as the skill of
Blackboared writing

Varimax Factor-4 This factor is composed of seven teaching
behaviours and accents for 6.6. percent of total variance.
These seven teaching behaviours with their respective factor
loadings are: Using verbal eving and prompts(0.827),
Reinforcing the desirable attending behaviour(0.787),
Using non-verbal oving(0.765), Using positive verbal
reinforcers(0.723), Attending individual pupils difficulties
(0.625), Guiding students to findout new doncepts/rule
(0.548), and using gestures meaningfully(0.497).

Out of seven teaching behaviours of the varimax factor
84 only four are related to the act of reinforcing or
motivating the students. These teaching behaviours are:
Using verbal aving and prompts, Reinforcing the desirable
attending behaviours, Using nonverbal eving and Using positi-
verbal reinforcers. These teaching behaviours are considered
in giving the name to the facot because these teaching
behaviours have higher factor loadings than the reaining three
teaching behaviours. This may safely be known as the
'Skill of Reinforcement'

Varimax Factor-5: The varimax factor 5 is composed of six
teaching behaviours Using previous knowledge of students
introduction(0.857), Using relevant statementsp questions in
untroduction(0.345), presenting introductory information
in a developmental sequence(0.839), Eliciting pupils'
responses through introductory questions (0.837), Drawing
students', attention(0.653) and establishing rapprt with
students(0.631).

Out of 6 teaching behaviours of this factor first
four are related to the act of introducing a lesson and have
comparatively higher factor loadings than the remaining two
teaching behaviours. Hence only these four teaching behaviour,
were considered in naming the factor. This factor may be termed
as the ' skill of Introductry of a lesson'

Varimax -Factor-6 Four teaching behaviours: providing opportun-
ities for pupils to apply what they have learnt to new situat-
tion(0.350), Recapitualating the main points(0.304),
Maintaining the classroom descipline(0.433) and Responding
pupils' questions satisfactrily(0.428). This factor
accounts for 3 percent of total variance.

Out of four teaching behaviours of the factor 4 only
first two are related to the act of summarizing the lesson
and have higher factor loadings than the remaining two
teaching behaviours. Hence only these two teaching benaviour
are considered in giving the name to the factor and thus the
factor may be called as the 'skill' of summarizing the lesson.
Varimax Factor-7 This factor is characterized by the highest
factor loadings of two teaching behaviours using relevant
audiovisual aids(0.675) and Using audiovisual aids suited to
the studnets understanding level(0.663) and accounts for 2.6
percent of total variance.

Both the teaching behaviours of varimax factor-7
are related to the act of using teaching aids and are
considered in the nomenclature of the factor may be teraned as
the skill of Using Teaching Aids'
Varimax factor-8 : The varimax factor-8 accounts for 2.5
percent of total variance and is composed of three teaching
behaviours. Asking pupils to give examples(0.714),
Presenting exemples clearly(0.599) and prescribing examples
relevant to the topic/rule(0.585)

14.11.

All the three teaching behaviours of the varimax factor 8 are related to the activity of illustrating with examples. Hence all the three teaching behaviours were considered in the nomenclatare of the factor. Thus the factor may be called as. the skill of Illustrating with examples.

Conclusion:

On the bais of the findings of the present study it is concluded that the Teaching Behaviour of secondary school teachers is composed of 8 teaching skills. These teaching skills are:-

(i) Skill of Questioning

(ii) Skill of Explanining

(iii) Skill of

x) Skill of Blackboared Writing

(iv) Skill of Reinforcemen

(v) Skill of Summerizing the Lesson.

(vi) Skill of Introducing the Lesson.

(vii) Skill of Using Teaching Aids.

(viii) Skill of Illustrating with Examples.

1.4.12.

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PROBLEMS OF DROPOUT AMONG THE TRIBAL CHILDREN IN PRIMARY SCHOOLS: AN EXPLANATORY STUDY

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A B S T R A C T

Fifty dropout Tribal (Santal) Children, Forty-six head of the households and fourteen teachers of the dropout children have been administered three separate interview schedules in order to identify the factors related to the problem of dropout among the tribal (Santal) Children at primary stage. The findings reveal that due to lack of proper social environment, psychological support and school setting, the tribal children are forced to withdraw from the Primary schools.

·I N T R O D U C T I O N

Control of dropout and education of the scheduled tribes are given priority under the educational system in the Sixth Five Year Plan. Art.46 of the Constitution of India lays down that "The States shall promote with special care the educational and economic interests of the weaker sections of the people, and in particularly of the Scheduled Castes and Scheduled Tribes and shall protect them from social injustice and all forms of exploitations". To fulfil this directive, efforts are being made on a continued basis by the Central and State Governments. A substantial percentage of money, resources and time have been allocated to achieve this objective but the results are not upto the expectations. The last thrity six years have been marked by appointment of various commissions and committees and the institution of new programmes and projects in the field of tribal education. Reports such as, Backwar Classes Commission (1956), the Scheduled areas and Scheduled tribe Commission (1962), Srivastav and his associates (1967,1971), Renuka Roy Committee (1960), Elwin Committee (1963), Sachidananda (1967,1972), Ambasht (1976), Dasgupta (1963), Rathnaiah (1977), Singh (1976,1978), Sinha (1976,1977,1980) and many others deal with the tribal community in India as a whole in a glabal perspective. Efforts have been at macro-level

to determine the status of education among different tribes
and at the micro-level to describe the conditions of life
within anthropological and sociological frame works.   A
sizeable amount of research such as Sharma (1976), Das and
and Paivato (1976), Broota (1979), Mishra and Tripathy(1980),
Puspa (1981), Prasad (1971,1972), Kochar (1964), Mukherjee
(1960), Sinha (1979), Singh and Sinha (1983) focussing on
deprived, dropout and family setting of the Santal/Non-
Santal tribes agree that poverty of the tribals is at the
root of slow progress in education.   Lack of suitable
teachers, syllabus and timings of the school are found
responsible for dropout of the students from schools.
Studies have not focussed on the social environment and
Psychological support which may form hindrances to the
schooling of the tribal children.   Many of the questions
yet to be adequately answered.

1.   How far social barriers and prejudices prevalent
     with tribal(Santal) societies act as retarding agencies
     for education of their children.?

2.   How far the psychological supports play an important
     role for the schooling of the tribal children?

3.   Are the tribals(Santals) prepared for education given
     the opportunities by foregoing economic advantages?

4.   What type of school setting factors responsible for

creating low motivation among the tribal children?

In the present study efforts have been made to identify the social, psychological and school setting factors related to dropout among Santal Children in Murbhanja District of Orissa.

O B J E C T I V E S :

1.   To identify Santal Children who have dropped out of the primary school and locate their families and teachers.

2.   To analyse the relevant components of social environment of the families of the dropout children.

3.   To identify relevant psychological factors.

4.   To measure the level of intelligence of the dropout children.

5.   To suggest some possible measures in helping those children.

METHOD OF STUDY.

SAMPLE: The study was confined to fifty dropout Santal Children from Primary Schools, Forty-six head of the households from which these children come and fourteen teachers of the dropout children from Maurbhanj District of Orissa. The purposive

method was used for identification and selection of sample.

TOOLS :

a) Interview schedules:- Three separate schedule were developed, one each for dropout children; family head and teachers.

b) Coloured Progressive Mottials developed by Raven

c) Detailed observation were made and recorded to develop representable cases and profiles of family, school and dropout children.

PROCEDURE:

Date were collected in three phases each extending over a period of about three months. Phase I involved identifying fifty dropout children from the Primary Schools using school records. Phase II involved interviewing all the heads of the families, dropout children and the selected teachers of the Primary schools using specified schedules. Phase III involved the measurement of intelligence of dropout children by individually administering CPM.

METHOD OF ANALYSIS:

The analysis of the responses has been done in terms of percentages obtained separately for children, their parents and teachers.

15.6

MAJOR FINDINGS

Social Environment:

1. The family structure of the dropout Santal Children is very much traditional. The children are under tight control of the heads. Their activities are to be decided by the parental wishes and choices. The school going children are also forced into economic activities at a very early age to support the parental income. This makes them leave schools. Families are closely knit and emotional ties are strong.

2. Dropout children belong to typical santal families where heads are engaged as daily wage earners like stone cu ter , wood cutter and agricultural workers etc. The families have income ranging from Rs. 200.00 to Rs. 500.00 per month.

3. Most santal parents are illiterate and therefore, they do not see the purpose of giving education to their children. Other members of the dropout families are illiterate.

4. The santal families are in the habit of taking alcholic breverages. Most of the dropout children are also in touch of handia occasionally or during festivals.

5. Santals religion is Sama. They perform all religious activities as per the Sama religion. They have strong faith in G—d. They are not contaminated by others religions.

6. Most of the heads of the dropout children have no
village status. Even those have status, they have no
special interest to send their children to schools.
A majority of the heads of the dropout children prefer
rural life instead of urban life. They are not in
favour of change and mobility as this may contain in a
tribal life

PSYCHOLOGICAL SUPPORT

1. For Santal family there is lack of psychological
support in existing social environment. The social
environment does not create the favourable attitude
of heads and dropout children towards study. All the
heads including dropout children have a kind of negative
attitude towards educated tribals. Most of the heads
are not interested to attend any function in the schools.

2. All the heads are quite ignorant about the purpose of
education of their children. They do not aspire upto
which class thir children are to be educated. Parents
are illiterate and having very low aspiration level
about their childrens schooling.

3. The mean intelligence score of the dropout children
is 15.36. So the level of intelligence is very low
as compared to normal children.

4. It is found that the present educational standing with

regard to reading and writing skill is very poor in case of dropout children. Even the students reading in class II, III and IV were not able to read small words written in bold letters.

SCHOOL SETTING:

1. In all the schools, the medium of instruction is Oriya. The mother tongue of the dropout children is Santali. Due to language difficulty all the dropout children have a kind of negative attitude towards books written in Oriya language.

2. Majority of teachers working in the Santal area are either middle passed or below matric. They do not have special training for teaching tribal children. All of them are quite unaware of the Santal dialect special needs of tribes and diffculties. All the teachers of the dropout children are non-tribals.

3. The syllabus is not suitable for the Santal Children as it is written in Oriya language. All the dropout Children prefer morning hours (6 AM - 9 AM) for their study at the school. All the schools in Santal area start from 10.00 A.M. to 4.00 P.M. During the school time most of the children are engaged in different types of economic activities.

IMPLICATION AND SUGGESTIONS:

Implication: In the Santal families, Socio

contd.

psychological factors play an important role towards the dropout of the children from Primary schools. The social environment does not seem to place value on schooling of their children. The negative psychological pressure from the existing social environment does not encourage the students to continue their studies. Lack of suitable teacher and difficulties in language create no motivation among the Santal children to come to the schools. So, dropout in Santal tribals share with other disadvantages in the social conditions and psychological support of the individuals. They have no special problems as triable except of language, psychological deprivation on the basis of language and regular drinking habits. Altitude seem to be comparable to poor and deprived but they are more closed. There is also no understanding among teachers, family members and children to appreciate each others problem and look at school as a positive agency. The findings of this study have revealed several significant problems, however, because of the selection and size of this sample, extreme caution must be exercised in attempting to generalise these findings. It is therefore necessary that replication studies within different types of tribal families across various educational levels may be conducted.

SUGGESTIONS:

1. To eradicate social superstitions and Prejudices.

   a) Adult education Programmes for tribals may help
      in superstitions and prejudices against realisation
      of the good in education.

   b) A vigorous programme of social development among
      Santal Community. This would come through a national
      system of social education for the tribal people. It
      would be more than literacy movement. It would
      include the entire canvas of tribal life in these
      areas. It would create in the tribal mind a
      consciousness of their own surroundings, problems
      and needs together with a new sense of national
      sentiments.

2. To develop proper psychological support:

   a) Teachers should play the role of counsellors with
      family and child together as a unit to create proper
      attitude among the tribal people towards different
      developmental issues. Proper counselling would help
      them realise the importance of education of their
      children and its future course of consequences.

   b) Since the tribal children have cognitive and cultural
      deficits, the compensatory pre-school education for
      them should be designed to compensate their reading
      and writing abilities before taking admission in

in primary schools.

3. <u>Economic Support:</u>

   a) The school schedule, holidays and vacations should be
      adjusted in accordance with the needs of the community
      and the local economic and agricultural operations,
      so that children can assist their parents in their
      economic activities.

   b) Government should make arrangements for stipends, book-
      grants and the provision for mid-day meals for the
      tribal children in order to create interest towards
      school and education.

   c) In case of education in the Primary stage for the
      tribal students, it should be craft-oriented. The
      craft should be suitable to the local conditions.

4. <u>School Setting:</u>

   a) Mother tongue of the tribal communities should be used
      as bridge language during the first year or so at the
      Primary stage to be ultimately switched over to the
      regional language.

   b) The text books for the tribal children in the Primary
      stage should be written in local dialect. It should
      contain information on daily life and about the
      different aspects of the tribal life and their culture.

   c) The attention should be given to the training of

the teachers meant to serve in the tribal areas.
Knowledge about the language and the culture of the
tribes concerned should be considered indispensible.
The teachers should also be given training about the
method of implementing instruction in tribal language.

d) Steps have to be taken to involve the local community
in different school activities. The school and
community should be drawn together by making the parents
and tribal leaders participate in some programmes or
activities of the school.

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STUDENT TEACHERS AND TEACHING PROFESSION

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ABSTRACT

The present study aims to find out the reasons attracting young man and woman towards teaching profession. A attitude scale constructed by Chauhan (1983) was used for this purpose. The sample consisted of 123 student teachers (70 male, 53 female). The study reveals that immediate solution for employment and 'to pass the time' are most important factors which motivate them to join teacher's training course.

Introduction:

There are many professions in our country available for youngmen and women, which they may choose after graduation or post-graduation.

There has been a tendency amongst youngmen and women to prefer administrative, executive and other increative services. Those who fail to achieve these, try to get a job from amongst other employment opportunities accessible to them. There is hardly a consideration for one's interest and aptitude. This helps increasing number of misfits on the jobs. Teacher education is no exception to it.

For various reasons teaching profession is usually a last choice for young generation. It is only recently that persons with good qualifications are entering into teaching profession. But for success as a teacher only academic qualifications cannot serve as a sole criterion. Persons with undecided mind and anxiety can not deliver the good whatever profession they join. The present investigation has been attempted to find out factors responsible for selecting as a career.

Objectives of the Study

Following were the objectives of this study:

1. to find out the reasons for taking admission in B.Ed. course.

2.   to explore the relationship between sex and reasons.

3.   to find out the effect of marital - status on
     attitudes of male and female students vis-a-vis
     teaching profession.

4.   to examine the impact of economic status choice of
     the job as teachers.

Design of the Study:

Method: Normative survey method was employed for
          conducting the present investigation, cross
          sectional approach was followed.

Sample: The sample consisted of 123 student teachers
          (70 male, 53 female) pursuing their B.Ed. degree
          at Regional College of Education (NCERT), Bhopal
          and Govt. College of Education Bhopal during the
          session 1983-84. Cluster random sampling technique
          was employed.

Instrument
used: Hindi version of the Attitude Scale constructed
          by Chauhan (1983) was employed for this study. The
          scale comprises of twenty items of Likert type.
          Besides these items their marital status and
          guardian's income were also recorded on the same
          tool.

Analysis and Interpretation of Data:

     Data were analysed to study the relationship of
three factors namely, sex, marital-status, and economic
status with each item. Rank correlation coefficient was

calculated to explore the agreement and variability on each item between males v/s females and unmarried v/s married. Kendall's correlation coefficient, was used to find out the impact of economic status on the agreement and variability on each item and the level of significance was also determined with the help of table P (Non-parametric statistics for the behavioural Sciences by Siegal, (1956) and appendix M (Basic Statistical Methods by Downi and Health, (1970). The obtained results have been summarized in Table below:

CORRELATIONS BETWEEN SEX, MARITAL-STATUS AND ECONOMIC STATUS ON EACH ITEM

Item No.	Sex-Difference	Marital-Status	Economic-status
1.	.675	-.875	.694
2.	.775	.225	.728*
3.	.375	.80	.839**
4.	1.0**	.987*	.872**
5.	.575	.013	.306
6.	1.0**	.90*	.928**
7.	.65	.862	.817*
8.	.70	.025	.839**
9.	-.375	-.375	.528
10.	.69	.9*	.839**
11.	.75	.725	.822**
12.	.80	.025	.583
13.	.80	.95*	.8*
14.	.975	.875	.955**
15.	.675	.90*	.84**
16.	.6	.975*	.828*
17.	-	-	.8*
18.	.7	.675	.461
19.	-	-	.905**
20.	3	.7	.794*

*Significant at .05 level,

** = Significant at .01.

Positive correlations were found (significant at .05)
between married and unmarried student teachers on item 4,
(I took admission in B.Ed. because it may help men in gett-
ing job early), item 6, (I am intrested in teaching
profession that is why I took admission in B.Ed.), Item 13.
(I took admission in B.Ed. to fulfil my husband/wives
desire I was not interested in it) Item 15, (I was not
interested in teaching profession but my parents insisted
me) and Item 16, (Teaching profession is an honest and less
corrupt profession). When persons from different economic
status were compared on each item they also showed
positive correlation (.05 level of significance) were
found on item 2 (I could not get any job despite of my
best efforts) Item 7, (I tried to get admission in Ph.D.
but I could not get, therefore, I took admission in B.Ed.),
Item 11, (I have to appear in a competitive examination,
I am preparing myself for that and doing B.Ed.)simultaneou-
sly), Item 13, 16 and 17 (My father can give less dowry in
my marriage therefore I am doing B.Ed.), High positive
correlations (.01 level of significance) were found on
item 3, (It is easy to get admission in B.Ed. because there
is no competive examation for its admission), Item 4,6 and
8 (I took admission in B.Ed. because it may help me in
getting job in emergency) Item 11, and 14 (I will get good
bride/bridegroom after doing B.Ed.), Item 15 and 19 (I am
doing B.Ed. because my parents will get more dowry in my
marriage).

An exact correlation was found on item 4 and 6 when males were compared with females.

Conclusions:

The above analysis revealed two main factors - immediate solution for unemployment and to pass the spare time, which motivate students to take admission in B.Ed. A similar finding was also reported by Chauhan (1983). Other factors responsible for their inclination towards teaching profession in order of their marit were, interest in teaching profession insistance by their parents or life partner.

Recommendations - It is clear from the data that students with middle and low economic status come for teaching profession because they feel an urgent need for employment to support their family. Therefore, there should be proper manpower planning so that the unemployment problem of trained teachers be minimized. There should be an aptitude tests and interview method to judge their interest towards teaching profession.

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-17.1.

"EDUCATION & WORLD PEACE"

"Since war begins in the mind of men it is the

mind of men that the defence of peace must be

created"

.... U.N.O.

SAKTI PRASAD MISHRA

C.I.E.T. N.C.E.R.T.

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The ignorant man is not the unlearned, but he also
does not know himself and the learned man is stupid, when
he relies on books, on knowledge and on authority to give
him understanding. Understanding comes only through self.
knowledge which is awareness of ones total psychological proce
ss. Thus education, in its true sense, is the understanding
of oneself, for it is within each one of us that the whole of
existance is gathered.

What we now call education is a matter of accumulating
information and knowledge from books, which any one can
do who can read. Such education offers a subtle form of
escape from ourselves and live all escapes, it inevitably
creates increasing misery. Conflict and confusion result
our own wrong relationship and alter it, mere learning
the gathering of facts and the acquiring of various skills
can only lead us to engulfing chaos and destruction.

To discover, what part of education can play in the
present world crisis, we should understand how that crisis
has come into being. It is obviously the result of wrong
values in our relationship to people, to properly and to ideas
If our relationship with other is based on selfcentredness and
our relationship to property is acquisitive, the structure
of the society is bound to be competitive and self isolating.
If in our relationship with ideas we justify one' idelogy in
opposition to another, mutual distrust and ill_will are the
ineviatable results.

Another cause of the prest chaos is dependence on
authority, on leaders, whether in daily life in the small
school or in the university. Leaders and their authority
are determating factor in any culture. When one fellow
another there is no understanding, but only fears and conform:
eventually leading to the crulty of the totalitarian state
and the dogmat: n of organized religion.

To rely on govt to lookto organisations and authorities
for that peace which must begin with the understanding
of ourselves is to cFeate further and still greator
corflict and there can be no lasting happiness as long as we
accept a social order in which there is endless strife and
antagonism between man and man. If we want to change the
existing conditions, we must first transform ourselves which
means that we must become aware of our own actions,
thoughts and feelings in every day life.

But we do not really want peace, we do not out: to put
an end to exploitation. We will not allow our greed to
the interfered with, or the foundations of our present
social structure to be alerted, we want things to continue
as they are, with only superficial modifications, and so the
powerful the cunning iniviatably rule ourselves.

Peace is not achieved through any ideology it does not
depend on legislation, it comes only when we as individuals
begin to understand our own psychological process. If we

avoid the responsibility acting individually and wait for some new system to establish peace, we shall merely become the slaves of that system.

And even though we may all be well fed, clothed and sheltered, we shall not be free of our conflicts and antagonisms which will merely have shifted to another plane, where they will be still more diabolical and devastating. The only moral or righteous action is voluntary and understanding alone can bring peace and happiness to man.

Beliefs, ideologies and organized religions are setting us against our neighbours, there is conflict, not only among different societies, but among groups within the same society. We must realize that as long as we identify ourselve with a country, as long as we cling to security, as long as we are conditional by dogmas, there will be strike and misery both within ourselves and in the world.

The constantly repeated assertion that we belong to a certain political or religious group, that we are of this nation or of what flatters our bettle egos, puffs them out like satps, until we are ready to kill or be killed for our country, race or ideology. It is all so stupid and unnatural. Surely human beings are more important than national and ideological boundaries.

The separative spirit of nationalism is spreading like a. over the world. Patriotism is cultivated and cleverly exploit. by those who are seeking further expansion, wider powers, greater enrichment and each one of us takes part in this process, for we also desire these things. Conquiring other lands and other people provides new markets for goods as well as for political and religious ideologies.

One must look at all these expressions of violence and antagonism with an unprejudiced mind, that is, with a mind that does not identify itself with any country, race or ideology but tries to find out what is true. There is a great joy in seeing a thing clearly without being influenced by the nations and instructions of others whether they be the Government, the specialists or the very learned. Once we really see that patriotism is a hindrance to human happiness, we do not have struggle against this false emotion in our selves, it has gone us for ever.

Nationalism, the patriotic spirit, class and race consciousness, are all ways of the self and therefore separative. After all, what is a nation, but a group of individuals living together for economic and self protecting reasons ? Out of fear and the acquisitive self defence arises the idea of "my Country", with its boundaries and tariff

walls, rendering brotherhood and unity of man impossible.
In every country the Government encouraged by organized
religion is upholding nationalism and the separative
spirit. Nationalism is a disease and it can never bring
about world unity. One of the chief causes of hatred and
strife is the belief that a particular class or race is
superior to another.

Can we ever attain peace through violence? Is peace
to be achieved gradually, through a slow process of time?
Surely, love is not a matter of training or of time. The
last two wars were fought for democracy. I believe, and now
we are preparing for a still greater and more destructive
war, and people are less free. But what would happen if we
were to put aside such obvious hindrances to understanding
as authority, belief, nationlism and the whole of hierarchial
spirit? We would be the people without austerity, human
beings in direct relationship with one another and then perhaps,
there would be love and compassion.

What is essential in education as in every other field
is to have people who are understanding and affectionate,
whose hearts are not filled with empty phrases with the
things of mind.

If life is meant to be lived happily with thought, with care, with affection, then it is very important to understand our selves if we wish to build a truely enlightened society, we must have education who understand the ways of integration and who are therefore capable of imparting that understanding to the child.

Without a healthy form of international understanding the modern world will be always running the risk of untold miseries, sorrows, sufferings even the global, destruction and total annihilation. Romain Ronalld has therefore rightly said "The two global wars, with their terribly devastating results, have atleast established the fact that the narrow bonds of solid and aggressive nationalism must be smashed through an unwalled and unbedged federation of mankind should be brought into being for fostering human relations on the plane of love pity and sympathy. To love one's own country is a desirable disposition. But to hate other countries is not only undesirable but also suicidal. That is why Burtrand Russell has observed "Patrctism in its common form is the worst vice from which the modern world suffers".

In order to eradicate such difficulties internationalism and international understanding is to be promoted through our education. No country should have any biased attitude

towards any other country and everybody should have an open mind to every thing. That is the scientific attitude towards all the matters in life. In this context the noble spirit and sentiment expressed by our ancient Indian Sanskrit verse is laudable and ideal. It says सर्वे भवन्तु सुखिनः, सर्वे सन्तु निरामयाः, सर्वे भद्राणि पश्यन्तु, मा कश्चिद् दुःख भारभवेत् which means "May all people of the world be happy and free from dieseases, may all percieve welfare and none in grief". The old tradition and glorious culture of India are always cosmopolitan and seek universal friendship and brotherhood based on mutual love, sympathy and understanding. The values like mutual toleration, liberal outlook, human sympathy and compassion are the life blood of the Indian heritage. The ancient Indian art, literature, and religion are replete with the instances of such good deeds and thoughts. Another Sanskrit verse very well conveys the lofty ideals of toleration and magnanimitge cherished by India through ages. This says - अयं निजः परोभति ज्ञानं लघुचेतसाम्, उदार चरितानाम् वसुधैव कुटुम्बकम् .... which means It is the thought of little minded persons, who say that this thing belongs to me, and that to others, but to liberal minded persons, the world is just like a family. Such a feeling of world family is expected only of a liberal minded man and such cosmopolitanism is conducive to international understanding and universal brotherhood.

Then question arises that what should be the role of education in promotiry international peace. The United Nations Educational, Scientific and Cultural Organisation in its preamble has enuciated "Since wars begin in the minds of men, it is the minds of men that the defences of peace must be constructed - the wide diffusion of culture and education for humanity, for justice, liberty, and peace are indispensable to the dignity of man and constitute a sacred duty which all the nations must fulfil on a spirit of mutual assistance and concern. As wars and peace are closely related to the mind. Knowledge and understanding critical thinking, favourable attitude, kindness or otherwise education is the most potential instrument for moulding the mental make up and its faculties. Importance of education for maintaining international peace and understanding cannot be overestimated and the guiding principle of education must influence internationalism in majority. The agencies of education do not limit themselves to different informal as well as formal agencies including all the mass media like Radio, T.V., Press, Cinema and soon.

International understanding can develop only through right type of education, which will allow full awareness, from healthy attitude, create desirable interests,

promote critical thinking and appreciation among the
students. It is the important responsibility of educational
institutions to generate a suitable atmosphere in which
children can develop the feelings of oneness and world
unity. Students should feel that they are the members of
one world community and be encouraged to practice tolerance,
mutual help and respect for others. The Seeds of world
citizenship can be sown in the classrooms, or in the
school campus.

Internationalism is not a plant that will grow of its
own accord. It is a tree to be planted, nourished and well
trimmed, it has to florish with the rich experiences of
life in the school and outside, it has to bear its flower
and elicit of amity and concord, understanding and friendship,
in a healthy and wholesome atmosphere.

Teachers have to play a very significant role in
developing international understanding among the students.
Success of each programmes largely depends on the competence
of the teacher his knowledge understanding, attitude, interests,
critical thinking and so on. The teacher is the catalytic
agent for realising the desired objectives and for translating
the dreams in to realities. However satisfactory the
curriculum and methods may be, unless the teacher has adequate

knowledge, skills and sincerity for utilising them, no objective can be achieved.

The teacher can impart the true facts and informations about various nations or countries effectively. He can form suitable habits and create positive attitutes in students for the growth of internationalism. He can bring home to children the truth that colour or creed or race makes no difference or creates no barrier if they have true perspective of information and orientation. Inertia, difference and ignorance are greater sins than doing harm to any country or nation. The Kothari Commission has therefore said "The Sins are more often now of Commission than of active Commission we should however guard overselves against this also for ignorance is often not less dangerous than hostility.

The teacher should be trained and oriented in the values and ideals of internationalism and in acquiring the necessary skills and appropriate methods of educating students in international friendship, unity and understanding for maintaining world peace.

Since the modern sinking world is often threatened with catastrophic events, all efforts are to be made for promoting mutual trust, cooperation fellow feeling, love, sympathy and good will among nations. The entire world is

now linked up with the heads of common destiny. No nation
can keep itself aloof from others and its happiness exclusive
of others. Peace and war cannot be confined to a particular
area. They will affect the whole world sooner or later.
Peace is like a cool breeze slow and steady, but war is like
wild fire sharp and sudden. Unless we are always prepared
for difending peace, war will take us a back at any time.
The International Organisations like U.N.O., UNESCO are
doing their best to ensure peace and avoid war. But all the
nations should have proper understanding about each other, and
view each national, international problem in its true perceptive.

Lastly to conclude "the Education and world peace, I would
like to emphasise again that India has the glorious heritage
of universal brotherhood and good will, toleration and
companion and we as the teachers and teacher educators of
this great nations should continue to ensure its status and
position, and ideologyes in the world map or culture and
friendship in maintaining world peace in up-most respect.

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NON-FORMAL EDUCATION: SPECIAL REFERENCE TO ORISSA

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ABSTRACT

This paper deals with pointing out the relevance of nonformal education system besides formal and informal system. A brief account of the development of nonformal education has also been given specially with reference to the state of Orissa. Lack of investment, insufficient motivation, droutin physical facilities, lack of public faith in the scheme uncertain quality norm, nonsuitable climate etc. are some of the reasons putting into problems to this nonformal education scheme. Certain remedial measures have been suggested by the author to overcome these difficulties in the way of popularis nonformal education.

Considering the global situation, we will see that there are two great things which is going to grab the human society. Among these the high growth rate of illiteracy and the   _ explosion of population are of paramount importance. If we will analyse the problems of illiteracy from a wider angle, we will see that nearly eighty crores of world population are illiterate, out of which 39 crores are from India. Fifty lakhs of illiterates are added every year to illiterate population in India. Although, India stands in the forefront of development among the third world nations, illiteracy is one of the greatest impediments for further progress. In order to provide them with the basic elementary education, the Central Government is trying its best. It is evident that the Formal Schools are inadequate to impart primary education throughout the country in rural as well as tribal areas. So the Non-formal education plays a key role to educate the rural and Tribal Children.

The Central Advisory Board of Education at its session held in November, 1974, and November, 1975, sent strong support to the introduction of gradual development of scheme of Non-formal Education. It was felt that more reliance on formal education was disproportionate both to the growing qualitative requirements and to the increasing demands for the greater relevance of education.

Realizing the needs of Non-formal Education in India, the Government of India have launched a scheme of Non-formal Education for Children of 6-14 age-group in nine educationally back-ward States, viz. Andhra Pradesh, Madhya Pradesh, Bihar, Jammu & Kashmir, Assam, Orissa, Rajasthan, Utter Pradesh and West Bengal in collaboration with the State Governments concerned.

Let us examine what is Non-formal Education and how it is different from Formal and Informal system of education.

Non-formal Education is an arranged system which is merely afford at convenient places, time and according to the level of understanding children or adults. Unlike the formal system of education, it neither offers a fixed time-table nor does it have a pre-determined courses of study. and of course it does not equip any one with a graded certificate. The Non-formal system has nothing in common with the formal/which suffers largely from an authoritarian outlook fixed goals, pre-determined curricula and very qualified academic teacher, whose sole purpose is to see that their words succeed at the terminal examinations. But in the Informal education, the education is given incidentally, unconsciously and unstructured. Philip H. Coombs, Roy, C., and Professor . Manzoor Ahmed (1976 p.11) defines Non-formal Education as "any organized educational activity outside the established formal system whether operating separately or

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as on important feature of some broader activity that is intended to serve identifiable learning clientele and learning objectives.

The main objective of Non-formal education is to equip the individual better to meet his role expectation in his various walks of life.

The system of Non-formal Education in India dates back to the antiguity, right from the Vedic Education. But the systematic research in this field first started by Gadgi (1945) problem of lapse into illiteracy. This pioneering work was followed by other research projects after a lapse of more than a decade by Singh (1957) and Khan (1958). Who undertook research on communication of ideas through adult education and problems of Social Education. Chaube (1963) Singh and Prasad (1965) Prasad (1967) and Dharm-Vir (1968) undertook studies in youth activities literacy development and adult interest, Sharkar (1972) Kudesia (1973) Agnihotri (1974) B.K. Taheddar (1975) studied the need and importance of non-formal education.

In Orissa, the studies by Pujari (1977), Bisoi(1978), Tripathy(1981), Samantaray(1982), stated the needs of non-formal education to attain literacy, numeracy, improve vocational efficiency and enable those who have not completed a stage of education. In 1980, the experimental project of non-formal education centres was introduced in Orissa. By 1983-84, there were 7,000 Non-formal Primary

Level Centres in the State of Orissa and 700 Non-formal
Centres, attached to S.T. Schools were under the control
of S.C.E.R.T. and 6,300 were under the control of Director
of Elementary Education. There are at present two types
of Non-formal centres in our State, i.e., Prathamika
Chatasalies on Primary Non-formal Centres and Madhyamika
Chatasalies on middle level Non-formal Education Centre.
There are two Non-formal level Centres alongwith 10
non-formal primary level centres under each Secondary
Training Schools. One Teacher Educator in each secondary
training school is incharge of 12 non-formal centres in
respect of their management and supervision, guiding the
teachers trainees to develop learning episodes, implementa-
tion of secondary syllabus for S.T. Schools.

The strategy will, no doubt, considerably reduce
dropouts, wastage, and the number of non-attending children.
The following Table reveals the present position of Non-
formal Education in Orissa:-

TABLE 1

Stastistics for 1983-84

No. of Madhyamika Chatasalies			
S. C.	S. T.	Other	Total
Boys	231	212	321	764
Girls	188	168	232	588
				1352

No. of Prathamika Chatasalies : 720

No. of Boys - 10314)
)   15471
No. of Girls -   5157)

No.	Age Group	S. C.	S. T.	Other	Total
1.	6 years to 8 years(Boys)	1242	323	4122	8595
2.	6 years to 8 years(Girls)	1109	965	1789	3863
3.	9 years to 11 years(Boys)	421	447	851	1719
4.	9 years and above 11 years (Girls)	441	216	637	1294
	Total	3213	2051	7399	15471

Source: Directorate of School Education, Adult and Non-formal
        Education branch, Orissa.

From the above data we are clear in our view that non-
formal education programme is now at infant stage in our
State and is confronted with varied problems. They are mentioned
below:-

1. There is lack of investment in this area since it incurs heavy financial expenditure to implement this programme as against the suggested norm of expenditure than Rs. 122/00 per capita approximately (excluding textbooks).

2. Sufficient motivation is lacking for the learners.

3. There is dearth of physical facilities.

4. There is lack of public faith on the scheme for its doubtful relevancy.

5. The quality norm of the scheme is yet uncertain.

6. The non-formal learners donot belong to the previleged classes.

7. No suitable academic climate is sufficiently found to launch the programme along with its diversified curricula, local need based learning materials; trained teachers are not available to handle this programme.

8. There is lack of positive attitude of the administrator as well as the legislatures in a constructive way towards this scheme.

9. Lack of co-ordinated efforts for the effective organisation of this scheme.

10. There is parental apathy towards the education of the illiterate matured girls.

11. There is too much involvement of children in various economic activities.

12. There is lack of initiative of other voluntary agencies in this area.

13. There is frequent flunctuation in the Government policy.

To overcome these problems of the Non-formal Centres in Orissa, few possible suggestions are given below:-

1. Additional Non-formal Education Centres should be opened, where the students enrolment is more than twenty five in number. To control and to teach a class of more than twenty-five students become impossible on the part of a facilitator for the effective Teaching-Learning Process.

2. The Administratores and the supervisors of the Non-formal Education Centres should pay attention to the regular running of the Centres.

3. The learners at the Non-formal Education Centres should be grouped on the basis of their knowledge, skill, experience.

4. Proper classroom, furniture, electricity should be provided to the centres, so that physical difficulties can be removed.

5. Training of the facilitator is the most important component for the success of Non-formal Education Pirgramme. Therefore, there is need of well qualified experienced, seasoned and devoted teacher who feels pleasure in facing the challenges of educating the non-starters and school drop-outs. The facilitatores should also be made aware of the concepts of the programme and the criteria of opening of the Non-formal Education Centres.

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6.   The facilitator and the teacher educators should be
oriented and acquianted with the language of the tribal
and rural children.

7.   . Parents should be motivated to send their children to
these non-formal centres.

8.   Preparation of instructional materials should be
developed in relation to the skill and demand of the Non-
formal learners.

9.   To meet the specific social, cultural, economic and
environmental needs of the learners, the curriculum should
be flexible and diversified one which would also be responsi-
ve to the day today problems of the learners. Teaching
should be linked with different occupation, work and specific
productive requirements of the learners residing in a
particular locality.

10.   In a functionally education set-up teaching should be
linked with different occupations, work and specific
productive requirements of the learners residing in a
particular locality. This programme should be developed
around specific tasks like agriculture, tailoring, industry,
preparation of bricks and wood spinning to meet the personal
and special need in particular and community needs in general.

11.   Textbooks and other instructional materials should be
provided to each students to eradicate the problem of poverty.

12.   Salary/remuneration of the facilitator should be at
least Rs. 300/- per month instead of Rs. 105/- per month and

steps should be taken for regular payment at the end of every month.

13.   The supervisors should pay visits to the learners homes and should study their personal problems they should also make people conscious of their role for their development.

14.   Steps should be taken by them to eradicate the management difficulties of the centres.

Thus the successful implementation of this scheme is waiting for an opportunity and co-ordinated efforts of the public, government, administrators and academicians.

NEED FOR FORMAL EDUCATION FOR
TRIBAL CHILDREN

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ABSTRACT

Present paper deals with the need of formal education for the weaker section of society, especially tribal population. Emergence of formal education for such a group has been viewed with regarding to various sociological aspects. Reference of various safeguards in the constitution, relevance of efforts to accelerate the universalization of education has been stated. Certain internal and external constraints have also been discussed and various remedial measures are put forward for effective planning of formal education for tribal children.

EDUCATION in the present times is the crucial investment to explore the avenues for development and to achieve self-sufficiency. It is more true in case of Scheduled-Castes and Scheduled Tribes and other weaker section who are excluded from learning and/suffer extreme poverty. In Post-Independence Period though some efforts were made to educate these disadvantaged groups, only after Independence the constitutional framers emphasised that every individual has equal right and should have opportunity to get education irrespective of caste, creed, race, religion and sex.

Every society in whatever stage of development it is, provides training for the very survival in the immediate environment. The kin, family, peer group and other organizations help the child in learning process which is in the formal/way. (or informal) Most of the formal education in early stage is an unconcious process.

The present age people mostly de-pend on formal education. The society demands a man with proper adjustment, socialization, dynamism and flexibility. Here comes the conscious learning procedure through formal education system imparted in the schools. It has three main components which play important roles: they are, the school, the students, and the teachers.

Though the formal education system in quite new to tribes yet one cannot deny the existence of a system of education in the tribal world imparted through youth dormitor-

ies to the young unmarried boys and girls. The dormito
in the tribal world is a place the purpose of which is to
educate younger generation about the norms and values of
tribal life and given instructions in religious, socio-
economic, politico-administrative spheres of their life.
However, in the changing times these dormitories are becoming
extinct in most of the tribal communities. In the place of
dormitories now formal educational institutions are coming
up as a result of the influence of neighbouring culture.
But these institutions are not useful for their routeen daily
life due to unsuitable content and alien medium of
instruction. Several writers have pointed out that the
tribals look upon modern formal education with suspicions
for they feel that it bring disequilibrium in their
socio-cultural system and detribalises the younger generation.

Even though to serve them better the need of formal
education to tribes is felt everywhere in India. The tribes
habitations usually correspond with isolated, inaccessible
hilly areas which are away from the remaining parts of the
country. They maintain unique identity with their traditions,
culture and social organisations. Due to their physical
proximity they were deprived of formal education for
centuries. "Many Tribal Parents regard the spread of
education with apprehension, for they feel that their boys
and girls will be turned into 'sahibs' and 'memsahibs' with
new and expansive habits which they can ill-afford and that

when they have left school they will leave their houses".

For reasons like their concern for the protection of distinct tribal culture they opted to insulate the tribes from the rest of the country by enacting laws and creation of tribal council for administration with certain degree of independence. Thus to some extent the British government policy of isolation deprived them the fruits of formal education. However, free India preferred the policy of assimilation that the tribal people can join the main stream of the Indian life.

However, India being a democratic country attached much importance to education and have given priority to impart education to the entire population by compulsory and free universalization of elementary education.

Constitutional Safeguard (Provisions)

Various safeguards that have been provided in the Constitution for promoting the interest of the people belonging to weaker sections particularly the Scheduled Tribes and Scheduled Castes. Framers of the Constitution being aware of the conditions and down-troddenness of these weaker section' had timely responded to their plight and special provisions are incorporated in the constitutions to overcome their difficulties and eliminate the existing social unequality.

The various constitutional safeguards that are provided for scheduled tribes have fallen under three broad categories

all aimed at their welfare, upliftment and development.
They are:-

1. Political - reservations of seats in legislatures and
       local bodies.

2. Protective - Special legislations for protecting economic
       interests.

3. Development - Implementation of Special Programmes for
       educational and socio-economic development.

Since education is an essential pre-requisite to the
all round development of tribal people our constitutional
framers have taken care to promote education among tribal
people. Article 46 of the Constitution lays down that "n"the
State shall promote with care educational and   ;
economic interests of the weaker sections of people particularly
of the Scheduled Castes and Scheduled Tribes and shall
protect them from social injustice and all forms of
exploitation". Article 29 and Article 30 provides necessary
safeguards to protect the cultural mores of any culturally
distinct group of population in India and provides equal
opportunity of education for every one.
Article 29 - (1) Any Section of citizens residing in the
territory of India or any part thereof having a distinct
language, script and culture of its own shall have the
right to conserve the same.
(2) No citizen shall be denied admission into any educational
institution maintained by the State or received aid out of

State funds on grounds only of religion, race, caste, language or any of them.

Article 30 - All minorities, whether based on religion or language shall have the right to establish and administer educational institutions of their choice and that the State shall not, in granting aid to educational institutions, discriminate against any educational institutions on the ground that it is under the management of a minority, whether based on religion or language.

Constitution further provides through Article 164, the necessary room for speedy tribal welfare by creating administrative provision of appointing Minister Incharge of Tribal Welfare in certain States.

Article 164 - The Chief Minister shall be appointed by the Governor and the other ministers shall be appointed by the Governor on the advice of Chief Minister and the minister shall hold office during the pleasure of the Governor.

Provided that in the States of Bihar, M.P. and Orissa, there shall be a Minister Incharge of Tribal Welfare who may in addition be in charge of the welfare of the Scheduled Caste and backward classes or any other.

Article 338 of the Constitution envisages the appointment of special-officer for SCs and STs to ensure that the Scheduled Tribes and Scheduled Castes are properly covered by the

safeguards provided by the Constitution.

Article 338 - (1) There shall be a Special Officer for the SCs and STs to be appointed by the President.

(2) It shall be the duty of the Special Officer to investigate all matters relating to the safeguards provided for the Scheduled Castes and Scheduled Tribes under this Constitution and report to the President upon the working of those safeguards at such intervals as the President may direct, and the President shall cause all such Reports to be laid before each house of Parliament.

(3) In this Article reference to the SCs, STs shall be construed as including references to such other backward classes as the President may, on receipt of the report of a Commission appointed under clause (1) of Article 340 by order specify and also to the Anglo-Indian Commission.

Article 339 - empowers the union to take necessary control over the administration of Schedule areas and the welfare of the STs, as Article 340 empowers the President to appoint a Commission, if he feels necessary to investigate into the conditions of social and educationally backward classes within the territory of India, to make necessary recommendations so that the Union and the State/suitable remedial measures. take

Under the Vth schedule Constitution empowers the President to enlarge or decrease the scheduled areas.

Grant is provided to States by the Government of India to meet the cost of the developmental schemes for the wt __re of the Scheduled Tribes or raising the level of administration of the scheduled areas.

In addition special constitutional provisions have been made with reference to ASSAM, NAGALAND, MEGHALAYA and Union Territory of MIZORAM.

Besides taking initial steps of taking elaborate measures in the Constitution to safeguard and promote the interests of disadvantaged groups, Govt. with the aim of encouraging formal education among the STs has introduced various incentive schemes from Primary education level to the University education. They are in form of attendance scholarships, Mid-day meals, post-matric scholarships, free books, book banks, uniforms, opening of ashram schools/ residentials schools etc. Some of the schemes are fully sponcered by the Central Govt. some are organized by the Central and State Governments. Some of the voluntary agencies working for tribal welfare have been provided with financial support.

More than 85% of the tribal people are still illiterate when the illiteracy level recorded at national level is just above 60%. It is an accepted fact that unless tribal people are educated they will not be having the necessary knowledge, confidence and navigation power to combat the external exploitation and lead the successful life with prosperity. The

is why Government has been/importance to impart education
among tribal people, Most of the financial assistance
towards the welfare of the STs has been earmarked for the
educational programmes.

giving

Comparative Literacy Rates

	STs	General
1961	8.3	24.02
1971	11.30	30.79
1981	16.35	36.02

The Tardy Growth of literacy level among STs is due to
Poly affect of many constraints which are both internal and
external in nature. The internal constraints are those
operating from our educational system itself and the external
constraints are those operating from outside the education
system.

External Constraints: There are of various nature like ecolo-
gical, socio-economic psychological constraints etc.
Communication is the main problem in tribal areas. Spread
of road communication is quite poor in tribal areas, and
it is an established fact that the enrolment in road side
schools is quite better than in interior village schools.

Though education upto primary level is free of cost
yet tribal parents have to meet certain unavoidable expenses
towards their children education which is hard to bear with
their poor financial inflow. Moreover, a tribal child

irrespective of his age has to render physical help to his
parents in their day-to-day life, which is making him to pay
less attention on school education. Most of the tribal childre
are first generation learners and as such, the home does not
supplement the educational effort made in the school. This is
the root cause of high rate of drop-out and stagnation among
tribals.

Internal Constraints - Unsuitable curriculum, medium of
instruction, irregular teacher unsuitable period of vacation
and lack of tribal/local teacher etc. It is very difficult
to find suitable teachers to work in tribal area. Those
qualified teachers posted in tribal areas, hardly continue
to stay at their place of work for a longer time due to
lack of facilities for their stay etc. That to most of
the teachers working in tribal areas are from non-tribal and.
With complete deprivation of knowledge of tribal culture,
local language, no adjustment to ecology etc. he always
looks for transfer from tribal area to non-tribal area in
search of better facilities. Lack of facilities in school
is another cause.

By close observation of existing socio-economic situati.
of tribes and the educational impedements in the present
formal education system, one has to look for an alternative
strategies of education. The strategy more suitable is
non-formal education which is flexible in its content,

pedagogy and timings. The present formal system cannot take care of the felt needs of the tribes. Hence along with formal education it is essential to have non-formal education to supplement and complement with each other in order to remove the gap between tribals and non-tribals.

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MISCELLANEOUS

RURAL-URBAN DICHOTOMY: SOME COMMENTS AND THOUGHTS ON CLASSIFICATION

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ABSTRACT

The definition of rural urban dichotomous classification bears some shortcommings in itself. The author has critically commented the definition of rural-urban classification given by the Census of India 1951 and onwards. He suggests a trichotomous classification: urban, semiurban and rural for more valid and reliable results of scientific studies in place of the urban-rural classification.

Rural urban dichotomy has been used world wide for Census tabulation. Here it is partinent to ask - Is there really such type of dichotomy? Before answering this question, it is relevant to discuss the prevailing definition of urban, infact rural has been considered as a residual category in Census tabulation.

Census of India from 1951 and onward defines urban area as follow:

a) all places with Municipality, Corporation or Contonment or Notified Town Areas.

b) All other places which satisfy the following criteria:

   i) a minimum population of 5,000

   ii) at least 75 percent of male working population being non-agriculture.

   iii) a density of population of atleast 400 persons per square kilometres.

The Director of Census operation were however, given some discretions in respect of some marginal cases in consultation with State Government, to include some places that had other district urban characteristics and to exclude under serving cases.

It is noticed from the Census definition that there are two distinct types of urban units. Those units which

satisfy criterion (a) by the virtue of a statutory notifica-
tion. In other words, there would be referred to as a
municipal board, contonment board, a notified area committee
etc. The other types of urban units would be those which
satisfy criterion (b). These would generally include places
which would otherwise have been considered as rural.

The above Census definition of urban is far from satisfa-
ction. Firstly when we consider population as a criterion, it
does not by itself distinguish with the urban from rural what
about the over grown villagesṃ which are so common in India.
According to 1971 Census there were 6332 villages having popu-
lation more than 5,000. Secondly, when one takes account and
density criterion i.e. 400 persons per square kilometer, there
are so many villages which satisfy this criterion. Thirdly, the
criterion of occupation structure is highly ambiguous and
subject to a series of criticism. Should one take the whole
working population into account or only certain section, such
as these in full time occupation of chief wage earners,
present occupation as the post occupation and what about the
people with duel occupation. Similarly, the criterion of
local self-government also poses the problem. The local
self-government Act under which places are given status of
urban differ from state to state. Problem also arise due to
boundary adjustment. Incomplete specification of condition
in the definition of urban areas the 1971 Census led to
exclusion of a number of places having urban local self-

government from the list of urban areas. Again the
discretion of Director Census operation in respect of
marginal cases for deciding 'urban' subjected to a series
of arbitrary decision. It has been asserted many a time
that an urban areas should be distinguished not merely on
the basis of defined demographic characteristic but also on
the basis of the level of infrastructure facilities. The
criteria based on such considerations have not been adopted
by Census of India while defining urban areas. The Census of
India is now working on possibility of arriving at criteria
based on such factors for defining urban area in 1991 Census
but at the 1981 Census the conventional definition has
been adopted.

Upto present day all terms of urbanism are highly
relative. There is no clear cut scientific method of measure-
ment of urbanism. Because there are so many indicators of
urbanism and if one take all these into account to define
urban then there will be many permutations and combinations
and it would in no way help to arrive at feasible definition.
Moreover, difficulties arises with regards to justification
                                    has
of indicators. Ashish Bose (1970) rightly observed that
'Looking at the Census history of last eight decades one is
strick by the voluminous discussion in numerous Census
reports on the definition of 'Town'. Inspite of the massive
literatures on the subject at time tedious at time consuming,
but always controversial even latest Census Commissioner

did not reach the end of the journey. What is rural and
what is urban? These questions still echo in the halls of
international seminars and conferences and even new conferen-
ces and seminars only lead to confusion. Even United Nations
Organisations is not able to find out the most feasible
definition for its comparison of data about urban. The
designation of areas as urban or rural is so closely bound
up with historical, political, cultural and administrative
consideration that the process of development of uniform
definition and procedure more very slowly. Not only do the
definition differ one another but in actual fact they may
no longer reflect the original intention of distinguishing
urban from rural. The criteria once established on the basis
of administrative sub-divisions (as most of the cases)
become fixed and resistant to change.

Studies of rural and urban societies cast considerable
doubts specially while studying small town and large size
villages as to whether there is a rural urban dichotomy in
India or even continuum. This depends upon whether urban
and rural forms of social life and distinct. Ahmed and
Ahmed (1966) arrived at the conclusion that Indian social
life neither exhibits the rural urban dichotomy nor continuum
of the western style. But when we do a close study of socio-
economic and demographic behaviour of rural and urban,
one can observe the distinction between rural and urban
however, this difference is less marked in case of mall

town (class IV, V & VI) and large size village (population more than 5000). Many a time sociological studies use urban-rural classification, as given by the Census as one of the basis of independent variable. Some of the studies bring out rural urban differences and some not. On the basis of two different finding, they contradict and doubt each other finding Census definition of urban area present a continuum ranging from minimum to maximum.

With any present definition of rural and urban there is no definite point where the rural ends and where the urban begins. The concept of dichotomy is clear only when it applies to the two extreme ends i.e. most urban and most rural. The distribution is not really two fold, in which one part is wholly rural and other is wholly urban, but a graduated distribution along a continuum from the least urban to most urban and most rural to least rural and consequently, the line that is drawn between urban and rural for Census purposes is arbitrary. This two fold classification may lose it relevance when various statistics of large size villages and small size towns is analysed, while this classification may gain relevance when we analyse the statistics of large town (class I, II & III) which show entirely urban character-istics and small villages (Population less than 5000) show entirely rural characteristics. Here question arises how these localities which show mixed characteristics rural and

urban is treated on merit basis.

To overcome some of the above difficulties which are faced in dichotomous classification, there is need to generate in between category viz. semi-urban. This consideration does not invalidate the   day classification but rather points to the need for a more systematic classification in accordance with the realities of the situation as it exist in India and many other countries. Sidney Goldstien in this context observed that in many countries dichotomy appears to be out dated. Thus it is recommended that three fold classification system should be considered for classification. International Union for the Scientific Study of Population also recommended for trichotomous classification. While Conference of European Statisticians suggested trichotomous classification for European countries.

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Bahl

SECULAR ATTITUDE OF PRIMARY GRADE CHILDREN: A RURAL AND URBAN COMPARISON

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ABSTRACT

This paper presents a comparison of secular attitude of primary grade children of urban and rural setting with respect to their sex and parents' educational level. Udai Pareek's Secularity Scale was administered on a sample of 177 IVth and Vth grade students studying in two NDMC, primary schools, situated in urban and rural localities. Results show that rural and urban students differ significantly in their secular attitude, boys are lower in secular attitude scores than girls, and parental educational level have direct impact upon secular attitude of children.

Secularism is one of the basic element in the process of modernization and it is the spirit which informs the constitution of India. Secularism has been defined as an attitude to life and a commitment to a set of values which can be described secular or opposed to supernatural. The meaning of secularism according to Webster's International Dictionary 'a view of life or of any particular matter based on the premise that religion and religious consideration should be ignored or purposely excluded; a system of social ethics based on doctrine that ethical standard and conduct should be determined exclusively with reference to present life and social well being without reference to religion; not formally related or controlled by religious body and rationally organised around utilitarian values and patterns receptive to new traits".

The constitution establishes no state of religion, no category of preferred citizens, throws citizenship open to all, guarantees equality of status and of opportunity, promises to promote the dignity of individual, prohibits descrimination by any agency on the basis of religion, it eschews forced assimilation to preserve the rich harmony of Indian culture within the framework of national unity. It provides to all religious denominations freedom of religion. The future and stability of India, the integration of various groups - linguistic, religious and caste depends upon the flow of secular values among masses and classes.

Need of the Study:

In India national integration has become necessary for national survival. The hurdles on the way of national integration are regionalism, religious sacredness, linguistic pressures and communalism. If one beliefs in the values of secularism and practices these in behaviour than all discrimination and separations vanishes from social behaviour of man. The question of future India is directly related with the future of young generation. What values the future generation is going to adopt and practice may be the basic concern of this paper. In our country educational facilities differ from urban to rural areas and even among different sections of urbanites and ruralites. Here attention has been made whether children of the same grade differ in their secular attitude with reference to their school background, parents education, sex and rural urban background.

Methodology:

Sample: The Sample consists 103 urban and 74 rural students studying in classes IV & V, 103 students from Mother's International School, has been choosen and 74 from NDMC school at Katwaria village. Random sampling method has been used to select the students.

Tool: Tool used for collecting the data was secularity scale by Udai Pareek. The validity and reliability of the scale is .79 and .87 respectively. The tool consists items on 4 areas..

Hypotheses:

  1) There is no significant difference on secular attitude of upperprimary grade rural and urban children.

  ii) There is no significant difference between girls and boys of rural and urban background.

  iii) There is no significant difference among children of varying parental education level.

Analysis:

  In order to reveal the difference between different groups of students according to sex, locality and economic status, 't' test of significance between two means have been applied. The formula used to calculate 't' value is

$$t = \frac{D}{*D}$$

where,   D = difference between two sample means; and

        *D = standard   error of difference between means.

TABLE - 1

Secular Attitudes Score - Rural Urban Comparison

Group	N	M	*	*D	D	t	Significant level
Urban	103	45.68	3.52	.544	8.07	14.83	.01
Rural	74	37.63	3.61				

  It can be seen that there is significant difference between rural and urban students in secular attitude. The

difference is significant beyond .01 level of significance.

TABLE 2.A

Secular Attitude of Girls and Boys (Mother's School)

Group	N	M	*	*D	D	t	Significant level
Girls	34	46.35	4.05	.79	.99	1.25	N.S.at .05
Boys	69	45.36	3.17				

TABLE 2-B

Secular Attitude of Girls and Boys (Katwaria Village School)

Group	N	M	*	*D	D	t	Significant level
Girls	38	38.86	4.02	.77	2.50	3.21	.01
Boys	36	36.36	2.54				

From Table 2-A and 2-B, it is evident that in public school (Mother's School) there is no significant difference between boys and girls on secular attitude. But in rural school (Kathwaria Village) the differences between boys and girls is significant at .01 level of significance. The mean score is higher in favour of girls in both the schools.

TABLE 3-A

Parents' Education and Secular Attitude of Children
(Mother's School)

Group	N	M	*	*D	D	t	Significant Level
Below inter	31	44.35	2.71	.65	1.91	2.93	.01
Above inter	72	46.26	3.86				

TABLE 3-B

Parents' Education and Secular Attitude(Kathwaria Village)

Group	N	M	*	*D	D	t	Significant Level
Parents B.S. or above	37	38.89	3.59	.82	1.51	1.84	N.S. at .05
Parents H.S. or above	37	38.4	3.52				

Table 3-A and 3-B reveal that there is significant difference in childrens' secular attitude with regard to parent's educational level. The high educational level of parents produce higher secular score. But there is no significant difference among students with different parental education in Katwaria Village School. Although score are

higher in case of those whose parents have higher educational
level.

Conclusion and Suggestions:

Rural and urban students differ significantly in their
secular attitude. Boys are lower in secular attitude score
than girls. Parents educational evel have difect impact upon
secular attitude of children.

In order to inculcate values pertinent to secular ideas,
school must have proper facilities and trained personnels.
Attitudes are linked with poverty and Socio-economic status
of people. Poverty or low economic status have adverse
effect on secularity. To remove poverty is not an easy task.
There are many other factors which put hinderances on the way
to secularism. School can provide best ways to inculcate
values among students not only through text-book contents
but such depends upon the frequent mixing and rejoicing of
different, groups of students from different cultures and
far places. Extra curricular activities like N.S.S., N.C.C.
are playing marvellous roles in this. Excurssions and
dramatics can be organized frequently during vacations. The
problem is not much with urban and public school students as
there are minimum facilities best tried to be provided. But
the problem remains as such in rural areas. These excurssions,
visits, exhibition-trips and camps must be organised more
promptly for rural students to bring them in touch with
public school students and facilities existing there upon.
Schools with good background and sound financial position can
initiate a process of communication with rural world of students.

22.1.

THE PROBLEM OF DOWRY
IN MODERN INDIA

* * * * * * * *

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A_B_S_T_R_A_C_T

The present paper deals with pointing out the evils of Dowry in our present day society. This social evil was mainly a problem of middle class societies earlier which is rapidly covering both horizontally and vertically to the lower and higher social classes now with acute repercussions. The researcher views that the reasons enforcing dowery in our society are besides the traditional concept of 'Dakshina', numerical, educational and economical inequalities. as well as more gap between the gage of marriageable girls and boys.

THE PROBLEM OF DOWRY IN
MODERN INDIA _ _ _ _ _

INTRODUCTION:

Dowry is an acute problem in 20th Century India.
Generally, it is a problem more for the middle income
groups than in the lowest and the highest income groups.
It is not a problem for the high socio-economic classes
because they are economically better and they can pay. On
the other hand it is increasingly becoming a problem for
the lower castes, because they try to copy the customs of the
people for which they are economically no match. And hence
the dowry becomes a problem for them. So that, Jammu reveals
affirmatively, "......the shoe pinches more in the middle
income groups, greater number from which seems to say 'No
it is not a problem of high castes, it is more a problem for
us". Briefly, dowry is a middle class problem in India.

The concept of Dowry:

According to the definition of Dowry Prohibition
Act, 1961, "dowry means any property of valuable security
given or agreed to be" given either directly or indirectly,
(a) by one party to a marriage to the other party to a
marriage, or (b) by the parents of either party to the

marriage or by any other person, to either party to the
marriage or to any other person, at or before or after
the marriage as consideration for the marriage of the said
parties". As well as the full-fledged attempt for the
clear definition of dowry of the Webstors Third New
International Dictionary (1956-68) is worthmentioning here.
According to this difinition dowry refers to (a) the money
goods or estate, that a woman brings to her husband in
marriage, (b) a gift of property by a man to or for his bride.
Looking at the meanings assigned to this term in 'a' above
in the context of Indian society, one may have nothing
to disagree with, but part 'b' of the meanings has been
embodied in a separate word. Both the parts (a) and (b) signify
to two forms of gifts given to the newly married couple-first
by the girls side to the boy which is known as dowry
and the second from the boys party to the girl which is
called bride price.

Bride Price & Dowry:

The bride-price system is prevalent among Harijans
and other backward communities and among tribals. In the
primitive society, the bride-price system refers to the
socio-economic phenomenon. Because of the economic division
of labour between the sexes, young girls are most useful to

their parents, helping in the production of food as well as domestic tasks. The loss of such services demands some componsation, which may take the form of bride-price. As well as the departure of a girl from her parent's family to the in-law's family is revealed a social or economical spiritual loss. This loss is recovered by the bride-price.

Due to the female infanticide among the tribal communities in India, the scaricify of women becomes a worthmentioning consequence. In the wake of the imposition of prohibition on infanticide practice by the British administration the proportion of the females to males has been showing an improvement for the last one century for which data are available. Simultaneously, with rapid expansion of money economy, education, new occupations and urbanisation, bride price is being gradually replaced by dowry even among them. Therefore, in recent years, the dowry system in India has spread both horizontally and vertically. Horizontally in the sense that it has spread to such regions and communities which, until recently, did not have it and which, in fact, had the bride price system, vertically in the sense that there has been a sharp increase in the amount of dowry demanded and taken. And it is ensured that the dowry is prevalent in the north of the vindhyas, and it will be spread to all parts of India towards the end of 2000 A.D.

Dowry among the
Non-Hindu Communities:

Dowry in one form or another is practised, not only

by Hindus, but also by Muslims and Christians in India.
Although Muslim bridegroom promises a handsom 'Meher' or
money as a part of marriage contract, known as 'Jode-Ke-Paise'
or the cost of the bridal outfit, it runs into quite a
few thousand rupees. It is also prevalent among Orthodox
Christians of Kerala and Catholies of Mangalore and Goa,
in that all expenses of Both the parties to the marriage are
born by the bride's people. The Christians of Mangalore, still
follow their pre-conversion custom of 'Kanyadan' and gift-
giving that puts a heavy burdon on the bride's family.

Dowry Growth:
(Traditional Reason:)

Several factor: may be identified as responsible for
the fostering of dow~ ~s an accepted system in the Indian
society. Early referer~~ to it can be found in the "Dharmashastra"
describing it as Varadakshina or Shastra describing it as
Kanyadan. And according to Hindu religion no sacrifice is
completed without appropriate Dakshna in the form of money
and present. So as the Indian people are more traditional-
value-oriented, they do not come back to give money and gold
as dowry in the marriage.

Dowry Growth:
(Modern Reasons)

The basic reason for the problem of dowry in Modern century is inequality (1) numerical inequality (2) educational inequality and (3) economic inequality. If the number of males were equal to the number of females, and if all males and all females were equal, educationally and economically, then there would not have been the problem of dowry certainly not as an acute one as we are having today in our society.

(1) Numerical Inequality:

If the number of females is equal to the number of males in each age group there should be no shortage of potential brides or grooms. However, there is always a gap between the age of husband and wife. Females marry at younger ages than males. With a wide gap between the age of husband and wife in a growing population country the effective number of marriageable females exceeds the effective number of marriageable males. It is this numerical inequality between marriageable males and females that contributes to the problem of dowry. Thus, when marriageable boys are in short supply parents of marriageable girls should offer dowry and even compete with one another to give larger dowry.

(2) Educational Inequality:

The educational inequality is one of
the reasons for the growth of dowry in India. For a variety
of reasons, a greater proportion of males than females, in
India are educated. Although literacy is not the same thing
as education, the difference in the proportion of literates
among males and females has been increasing steadily.
For an instance, in 1901, the male literacy was 9.8 percent
and female literacy was 0.6, resulting in a difference of 9.2
percent. But in 1981, the proportion of literates was 46.7 %
among males and 24.9% among females, resulting in a
difference of 21.8% . This inequality reveals that there
are not only more marriageable males than females with
education, but that the former have more number of years of
education than the latter. In such a situation, dowry is
demanded or offered as a compansation to make the educated
males marry the less educated or illiterate females. It is
axiomatic that the greater the difference between the
educated brides and grooms, the larger are the dowries
demanded and given. By and by, this practice of demanding and
giving dowry has become a social custom, and even the parents
of males without education demand dowry and those of females
with education offer it.

(3) Economic Inequality:

It is common knowledge that there exi
economic inequality among marriageable males and among
marriageable females. Education being equal, males demand
a larger dowry in term of csh and/or kind. Likewise, males
with an education that is likely to enable them to earn more
money demand a larger dowry. The Central Government Class I
Officers fall under this category. Similarly, education being
equal, parents of gainfully-employed females are unlikely
to offer larger dowry. Even the parents of educated males
do not demand a large dowry from educated and gainfully
employed females because they know that the earnings of
their prospective daughter-in-laws will more than
compensate for a larger dowry. Thus, economic inequality
also contributes to the existing dowry problem in modern
India.

Dowry Deaths:

The number of dowry deaths is ever on the increase.
"Women dies of burn injuries", "Husband kills wife for
the lust of scooter, T.V. and Fridege", "Avaricious in-laws
burn young bride for not bringing sufficient dowry" — such
headlines apper frequently in our newspapers. In 1981, the
capital witnessed 394 cases of bride burning mostly suspected

to be dowry-related. Several such death reports came from
U.P., Punjab, Haryana and Bihar. The basic question is why are
"dowry deaths" increasing? What is the most prominent change
that we find in our society? The most prominent change is
emancipation and self-sufficiency of woman. Woman, today ,
is ready to enjoy all the legal and social concessions of
'weaker sex' but is not prepared to be acknowledged as
'weaker sex'. She wants to taste in experience and practice
that she is in no way lesser than man.

Dowry Prohibition Act:

The earliest Legislation against dowry in this
subcontinent, was passed in the pre-independence days by
the Government of Sind, now in Pakistan. The bill was
piloted in 1946 by Dr. Hemchandra Wadhani, a Minister of
Sir Gulam Hussain Hidayatullah Cabinent, and he was given
full support by the Muslim dominated Government, particularly
the Amil Community among the Sindhis. As marriage and divorce
come under the concurrent list under the constitution, the
Central Legislation was enacted in 1961 by the efforts of
Late Pt. Jawahar Lal Nehru and followed by the State
Governments of Bihar, Orissa, West Bengal, Punjab, Haryana
and Himachal Pradesh. The Karnatak Anti-Dowry Bill was passed
in 1976 and all other state laws were suitably amended in

order to make, giving, taking and abetting dowry a cognisable
offence. The Karnataka bill is the latest which extends the
definition of dowry to include any financial help given by
any person to a young man for his education or business with
the intention of giving his daughter or any other relation in
marriage to him. The social feature of this bill is that it
provides for the imposition of tax on 'Luxury Marriages".
A marriage costing more than Rs. 5,000/- and upto Rs. 50,000/-
will be taxed at the rate of 10% and a marriage costing more
than Rs. 50,000/- will be taxed at the rate of 60%. The efforts
of legislative actions are appropriates in this situation.

Conclusions:

Dowry is more familiar in the Southern parts of India
than the Northern. Generally, it is a problem for the
middle class people. Simultaneously, it destroyes the
prospective future of the Indian women. Dowry prohibition
Act, 1961 contribute largely to remove this social evil.
But there are some other welknown factors without which
this evil may not be wipe out from the face of the society.
They are - self awareness among the women, reduction of the
population growth, expansion of education, equally
distribution of job opportunities among male and female
reduction of the age inequality among the marriageable girls

and boys and above all the litigation of the traditional

related attitude of the people. Excluding it, the efforts

of the voluntary organisations are the most important

to solve this problem.

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23.1.

The Youth and Mass Media

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Abstract

In this paper opinion of students of Delhi has been
sought. with respect to the usability. Ownership and choice
of the material/ programme in three widely used mass media
news_paper, radio and television. Datta have been collected
from 200 students studying in senior secondary and under_
graduate classes   Results show that almost centpercent studer ts
use these three mass media(98.5 percent newspaper, andradio,
and 95 percent T.V), out of which the proportion of regular
user is:84 percent newspaper 69.5 percent/students subscribe
newspaper, 91.5 percent have their own radio set and only 44.9
percent have their own T.V. set. College students significantly
differ· that that of the school students with respect to the
mode.of using T.V.

radio and
7.5 percent
elevision.
t is learnt
lat 86 per_
ent.

Introduction

Mass media are defined as those instruments of communication which convey identical message to the large num of persons who are often physically seperated. The identical one way messages may be printed, as in newspapers, books pamphlets, comics and magazines. They may be on films as in film strips and motion pictures. The mass media also include radio, television and recording.

Various sorts of mass media have wide ranged effect both in the cognitive and non cognitive behaviours of human beings Scientific inventions and technological advancements have contri. buted a lot in the multimedia communication. It has become a status symbol in our society having a variety of communication objects. Keeping in view the vitality of mass media in present day society, in this paper, a short survey has been conducted on the three widely used mass media. These are newspaper, radi and television.

History:

In the history of Indian press, the first newspaper on modern lines appeared in Calcutta on the 27th January, 1780 It was the "Bengal Gazettee" published in English by an Englishman, J.A. Hickey. Since than much progress have been recorded by the press facing odds and evens. A recent survey shows that the total number of newspapers in India during 1979 was 17168.

Akashvani(Broadcasting) was pioneered in India by the efforts of amateurs (Madras Presidency Club in 1924)

followed by private enterprises. Government took it later
and did every possible effort to make it available to each and
every person in the country. According to a recent estimate
nearly 400 million potential listeners are to All India Radio

Doordarshan(Television) has completed its 25th
anniversary of its inception very recently. The first
T.V. transmeter was installed in 1959. These were 18 in 1980
and estimate of 180 transmeters is expected by 1985. Doorda.
started its services using the auditorium attached to the
Delhi Station of A IR which was converted into the television
studio and daily one hour service commenced on August 15,1965.
It was started as a modest affair in India on September 15,193
Doordarshan was formally separated from All India Radio on
April 1, 1976.

Mass media have much importance as medium of information
and education perticularly in a vast and developing country
like ours. Not only quantitative expansion but qualitetive
improvement can be assured due to the use of mass-media for
educational purposes. No any other institution can be more
economic, effective and bonefical than the mass media, so widely
used in the length and width of the country for universaligation
of compulsory education amongst all.

Mass media are helping not only in vitalising formal
education through various ways but certain concepts like corre
pondance education, distance education, ETV, open school,
open university etc, are with their origin in the use of mass
media in the universalisation of education.

OBJECTIVES

The major objectives of this study were:

1. To study the using habit of mass media of Delhi Students,

2. To study the ownership proportion of newspaper, radi. and T.V. of Delhi students.

METHODOLOGY

For the purpose of this study a sample of 20C school and college students were taken from randonely selected four senior secondary schools and four colleges of Delhi University. They were asked to response in a semistructur ᒾ open ended questionnaire seeking information regarding their using habit, ownership and choice of materials/programs of news paper, radio and T.V. Responses thus received were categorised in limited categories and analysed as follows:

ANALYSIS AND INTERPROTATION

In Table 1, proportions of students using newspaper, radio and T.V. have been given.

Table 1

Using habit	News paper			Radio			Television		
	School	college	total	School	College	Total	Sch ool	Coll ege	t
No use	0	3	3	1	2	3	1	9	
rarely	5	1	6	6	9	15	13	ᕲ	
occasionally	14	9	23	28	35	63	35	39	7
regularly	81	87	168	65	54	110	ᕲ	46	

* Significant at 05 level

It is seen from Table I that 98.5 percent students
use newspaper and radio while 95 percent use T.V. The
proportion of regular user of these three mass media are 84
percent, 59.5 percent and 49.5 percent respectively.
Proportion of school students significantly differ than that
of the college students only incase of those who do not use T.V.

In Table 2., the proportion of school and college student
on the basis of the availability of mass media to them
have been given.

Table 2

Availability of Mass Media to Students

availability	Newspaper			Radio			Televisi..		
	School	College	Total	School	College	Total	Ta tal	Sch col	College
Owner set	86	86	172	93	88	181	13	76	
Friends/ Neighbours	6	4	10	3	3	6	35	7	
School/college	7	4	11	2	1	3	51	0	5
Market/any other	1	3	4	1	6	7	0	8	8
Not available	0	3	3	1	2	3	1	9	10

* Significant at 05 level

** Significant at 01 level

It can beseen from Table 2 that highestproportion of school
proportion of students in case of the availability

of mass media, are of those who subscribe newspaper at have
radio and TV set. A good proportion of school students view
TV programs in school T.V. set, while none of the college
students does so. Significant difference have been observed
among the propotions of school and college students with
respect to availability of TV set....

Conclusion

It can be concluded from the above survey that mass media
are widely used among students. Eeducational Porgrams on
radio, TV can improve both quanlity and quality wise literacy
status. Though the proportion of students using TV is not
high enough, this may be because of its recency and cost. Since
about 25 percent school students view programe in theschool
TV only which can be used for educational purposes more
intensively and widely.

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A STUDY OF THE RELATIONSHIP BETWEEN SELF CONCEPT AND SCHOLASTIC ACHIEVEMENT OF VII GRADE STUDENTS

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ABSTRACT

A Sample of 300 VII grade students were administered Self Concept Scale by Singh and Singh (1968) and two groups of students with good self concept and poor self concept were identified by calculating P_{20} and P_{80}. Results show that scholastic achievement of students with good self concept was significantly better than those students with poor self concept. Self concept shows significant high positive correlation with scholastic achievement of VII grade students

Introduction

From the time when his life begins, each child is very
much a social creature. As young infant strong ties are
being established between him and other human beings. Inter-
woven with the child's earliest experiences and expectation,
and intemately connected with his survival from day-to-day,
are associations with others. These accumulate during the
ensuing weeks and months as he grows more and more alert to
what is happening about him. The child's experience with the
humanity of others helps to shape-his own humanity.

In the normal course of events a child becomes more
activily social as he grows older, builds relationships with
other persons and acquires values and aspirations that
others share. But from the beginning he has a streak of
individuality of his own and as time passes he comes
increasingly aware of himself as a separate being. This
awareness of self is known as self concept.

Young child is depended on other for his welfare, he
has little confidence in himself. As he matures, his
behaviour is making by a growing attitudes of self-assertion.
He strive to gain self-confixence is the management of his
own affairs and to shift from dependence on others to
dependence on self.

Sigmund Freud explained the development of personality
according to the self-concept mechanism that produces the

libido or basic instinctual energy. He includes in his
explanation of the self concept three system.

"The Id, the ego and the Super ego" which represent
three stages of the developing self-concept.

Self-concept -

An adequate concept of the self is basic to an
interpretation of personality. In any discussion of the self
term such as the following are commonly used to denote the
various aspect of self hood "self conciousness", "self
realization", "self preservations", "self confidence", "self
assertion", "self dependence" and "self esteem".

So "The individuals awareness of an identification
with his organism, connative power and mode of conduct and
perfomance, accompanied by specific attitudes toward them
is called self concept".

Scholastic Achievement -

To know the scholastic achievement of the students
researcher took the school result of class VI in the subjects
like English, Hindi, Mathematics, Science, Social Science,
Sanskrit/Urdu, art, craft, PT test. Students marks in the
main subjects obtained in the previous examination were
considered as representative of their scholastic achievement.

There are many problem faced by the adolescents, if we
look at the scholastic achievement of these students we get
disappointed. Why it is so? This question arises in the mind
of the research. Therefore, the researcher wanted to know who

are those students who can not adjust themselves in life and so poor achievement in studies. Many Psychologists hold the view that adolescent problems may be in the areas of educations. What is the perception of adolescent about themselves? Do their self-concepts show any influence on their scholastic achievement? In the bid of find out a suitable answer of these questions relationship of students self concept with that of Scholastic Achievement Occured to the mind of the present researcher.

Thus the problem related for the study is "A Study of the relationship between self concept and Scholastic Achivement to VII grade students."

Related Literature -

Zuckerman,S.L. (1954) studied the difference in self concept of boys and girls. His interesting finding is that the self concept of boy is higher than that of girl when compared with each other.

Mussen,P.H. (1958) studied the self concept of adults and found that the self concept is a developing construct which through stable over a period is yet amenable to change.

Mukherjee B.N. (1966) studied self concept and achievement. In a study they found that there are a logical relationship between achievement and self concept.

Mehta P.H. (1968) studied on the relationship between self-concept and achievement and found the relationship to

be linear.

Vasantha R. K. (1973) studied the relationship between self concept and achievement. Some of the findins are starting, as for example "that the lowest intellicence group among the forward community students has higher mean self concept and achievement score that the highest intellicence group among backward community students.

Objective of the Study -

The objective of the present study are as below:-

1) To study of self concept of VIIth grade students of pre-adolescence stage.

2) To study the scholastic achievements of pre-adolescent students.

3. To study the relationship between self concept (good and poor) and Scholastic Achievement.

Hypothesis - Hypothesis of the present study are as below:-

1. Self-concept and Scholastic Achievement are positively correlated.

2. There is significant difference between good self concept student and poor self concept students on Scholastic Achievement.

Delimitation -

1. Only male students were included in the sample.

2. Only VIIth grade students were studies.

3. The students were selected from seven schools of Gorakhpur City.

4. Average age of the students was 12 years.

5. Only one self concept scale constructed by Dr. Singh ment for young children was used.

6. School marks have been used as Scholastic Achievements of students.

The Procedure of the Study

The Method of Study -

The method employed in the present study were survey method and comparative method. The survey method was used to study the self concept and scholastic achievement of student, while the comparative method was used for making the comparision of scholastic achievements of two groups know as the children of good self concept and poor self concepts.

Tools and Techniques -

Date were collected mainly with the help of one tool, due to study the self concept of the subjects with the help "Self Concept Scale for Children" Singh & Singh (1968).

Sample -

The Universe of the present investigation consisted of the VIIth grade regular students studying in the various schools in Gorakhpur City. The study was conducted on 300 students only. Purposive sampling technique was used for drawing the present sample.

Procedure of the data collection -

The self concept scale for children was administered to different school students. Scoring of the test was done as given in the manual of the test.

Result and interpretation -

Self concept of VIIth class children - The score obtained by 300 students were tabulated and their means, SD and percentile P_{20} and P_{80} were calculated as given below:

$$N = 300$$
$$\bar{X} = 84.40$$
$$SD = 9.55$$
$$P_{20} = 76.3$$
$$P_{80} = 92.95$$

The above data show that the mean score of self concept of the VIIth grade students was found 84.40 with SD 9.55. The two percentile value P_{20} and P_{80} calculated for the purpose to locate a cut point for indentifying students with poor and good self concepts. The two values P_{20} and P_{80} were found 76.3 and 92.95 respectively.

Scholastic Achievement of VIIth Class Students -

For Scholastic Achievement grand total out of 1000 marks in all subject secured by the Students were taken. Their marks were on the basis of their half yearly examination. The marks obtained by 300 students were tabulated and $\bar{X}$, SD were calculated as given below:

$$\bar{X} = 462.67 \text{ and } SD = 121.00$$

The above data show that the mean score of scholastic achievement of the VII grade students was 462.67 with SD 122.0. Thus it can be calculated that the scholastic achievement of VIIth grade students is about 46 percent.

Scholastic Achievement of the good self concept student and poor self concept students of VIIth grade

There were 60 students who have good self concept and 60 students have poor self concept. Below are given the N, $\bar{X}$, SD and corresponding t value in order to compared Scholastic Achievement of these students who have good and poor self concept.

Good Self Concept	Poor Self Concept
N = 60	N = 60
$\bar{X}$ = 624.5	$\bar{X}$ = 377.83
SD = 128.40	SD = 176.00

and t value = 8.6

Level of Significance = Significant at .01 level.

Thus, it can be said that the difference between the two group is highly significant. Students with Good Self Conc. are better in Scholastic Achievement than those of the studen. with Poor Self Concept.

Relationship between Self Concept and Scholastic Achievement

The correlation value "r" between the score of the self concept and the Scholastic Achievement was found to be .76. The number of students was 300 and expected value at the number is .15 at .01 level. This value of correlation is larger

Date.............26.1.82.

than the expected value. This indicates significant positive

correlation between the two variable. It means that good
                        associated
self concept is / with good Scholastic Achievement and poor

self concept is related to poor Scholastic Achievement.

Conclusion -

1. Self concept is positively correlated with Scholastic
   Achievement.

2. Good self concept group is better than that of poor
   self concept group in Scholastic Achievement.

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